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ABSTRACT

The second volume of the Research Register contains summaries of published and unpublished educational research completed in Northern Ireland during 1970-72. Its purpose is to provide nonevaluative summaries of relevant studies for use by researchers and teachers. Research focuses on such topics as parent, student, and teacher attitudes; handicapped children; curriculum development; educational history; language development; educational philosophy; teaching methods; and testing. Part one contains 197 theses completed in education departments at the New University of Ulster, Queen's University in Belfast, and the Colleges of Education. Some psychology and theology theses are included also. Entries are listed according to school where submitted and most are abstracted. Part two lists 26 articles and books published in Northern Ireland during 1970-72, including some pre-1970 publications that were omitted from Volume One. Entries are listed alphabetically by author and most are abstracted. All items are numbered and a subject classification is provided in part three which refers to the numbered items. (ND)

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# THE NORTHERN IRELAND COUNCIL

## FOR

# EDUCATIONAL RESEARCH

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## Register of

# Research in Education

## Northern Ireland

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PUBLICATIONS OF THE NORTHERN IRELAND COUNCIL FOR  
EDUCATIONAL RESEARCH

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Register of Research in Education -  
Northern Ireland

Volume 2  
1970-1972

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## FOREWORD

Volume One of the Register of Research in Education - Northern Ireland, listed the titles of over 250 educational research studies completed between 1945 and 1970. Since that time there has been a substantial increase in the yearly output of educational papers and the present volume includes some 200 titles. Several factors have contributed to the expansion. There has been an increase in student numbers in the traditional educational institutions and several new departments have become operational during the past few years. We are pleased to include research from the Education Centre at the New University of Ulster and the Institute of Education at Queen's University, Belfast. We are also including the titles of dissertations presented for the Bachelor of Education degrees at the Colleges of Education.

The present Volume is in three parts. Part One, the major section, lists and summarises unpublished research studies carried out in the major educational institutions, where the original theses and dissertations are available for consultation. Part Two lists published educational papers and books, including some pre-1970 publications which were inadvertently omitted from Volume One. A subject index is provided in Part Three.

It would not be possible to produce a Register of Research without the abstracts provided by the authors of research work and the assistance of staff within the educational centres. I would like to thank all of those who contributed to this volume and, in particular, Mrs. Nancy Long, who designed and typed the manuscript.

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PART ONE

SUMMARIES OF UNPUBLISHED  
RESEARCH PAPERS

EDUCATION CENTRE

Summary of thesis presented in fulfilment of the requirements for the degree of Master of Philosophy.

1. SIXTH FORM RELIGION IN NORTHERN IRELAND  
Greer, J.E. (1972)

In 1968, a questionnaire was administered to a sample of 1,631 sixth-form pupils in 42 county and protestant voluntary schools in Northern Ireland. The questionnaire included questions relating to belief in God, Jesus, life after death, the Bible, the Church, school religion, religious behaviour and judgement on a number of moral issues. Questionnaires were also completed by over half of the parents of the pupils and by the heads of Religious Knowledge departments in most of the schools.

Analysis of the results revealed that Northern Irish pupils were more inclined to religious belief and practice than English pupils, but were more strongly opposed to compulsory religious instruction in school and more critical of the Church. On every criterion, Northern Irish girls were found to be more inclined to religious belief and practice than Northern Irish boys. There was a significant relationship between the religious belief and practice of parents and their children, and also considerable differences between the religious belief and attitude to school religion of parents and their children.

Belief in God was found to be related to sex, denominational allegiance, residence inside or outside Belfast, parental occupation and type of school, but was not related to A-level subjects. Belief



in God was related to other religious beliefs, attitudes and practices and also to moral judgement. Religious Knowledge in school was found to be lacking in specialist staff and in the objective criteria by which achievement is measured in other subjects.

## EDUCATION CENTRE

Summaries of theses presented in partial fulfilment of the requirements for the degree of Master of Arts.

### 2. A TEACHING STRATEGY FOR THE DEVELOPING NATIONS

Davies, J.W. (1970)

A review of the Jensen controversy is made in order to establish an educational position on the question of possible inter-racial, generically-defined differences in intelligence. A survey of the environmental influences on intelligence is then made. Such influences include the school, the home, contact with adults, maternal care and parental attitudes towards academic achievement. This leads to a consideration of the 'critical periods' hypothesis. A Piagetian view of intellectual growth is adopted as an authoritative and more optimistic approach for the teaching of children who will have suffered considerable environmental deprivation. The work of J.P. Guilford on the nature of the human intellect is discussed in order to suggest a teacher-attitude to mental abilities better linked to the need of developing nations to exploit the full range of their human resources. With such a need in mind, Problem Solving and Creativity are suggested as the most profitable focal points for teachers' consideration.

3. THE EDUCATION OF THE PHYSICALLY  
HANDICAPPED AT THE SECONDARY SCHOOL  
STAGE WITH PARTICULAR REFERENCE TO  
THE STUDY OF GEOGRAPHY

Farrow, A.W. (1971)

A questionnaire was sent to all the schools in England catering exclusively for the needs of the physically handicapped with particular reference to methods and facilities for the study of geography. Some 30 per cent of these schools replied. A comparison was made between these schools and those for the able-bodied. The results did not indicate that pupils in special schools were at an educational disadvantage.

The author considers there are two major problem areas for the handicapped - (1) lack of mobility and (2) the inability of those severely disabled in the upper limbs to draw maps and diagrams. A Farrowgraph, a simple electrical drawing aid which can be operated by the head, chin or feet, was designed by the author to enable the severely handicapped to draw maps. The specifications of this aid are described. An investigation was carried out to see whether the use of the aid helped in the understanding of geography. Subjects gained overall on objective tests when using the aid as compared with trials when they did not. All marks were related to the means of a control group.

The aid was also thought to be useful for the diagnosis and perhaps correction of visual deficiencies in the handicapped.

The author developed and describes the use of a special sedan chair for field trips.

#### 4. EFFECTIVENESS OF MICROTEACHING

Liebmann, R.A. (1971)

A general review of simulation is followed by a discussion of microteaching as a simulation. The objectives of microteaching are examined in relation to its effectiveness as a teacher training method. The research in this area is discussed and the author concludes that research is needed to determine if microteaching has any effect on the students' subsequent behaviour in the real classroom situation.

#### 5. THE AIM OF MORAL EDUCATION AND SOME OF ITS IMPLICATIONS

MacAuley, C.M.

A discussion of some of the aspects of the meaning and antecedents of moral autonomy. The author distinguishes two main streams of opinion. One emphasises the social aspects and genesis of morality, represented by Durkheim. The other emphasises the position of Kant and Piaget, which in its 20th Century form lays stress on maturational and epistemological factors. The author considers that there must be room for both views. There follows a section concerned with some of the difficulties educators have seen in any attempt to apply the idea of moral autonomy in practical situations.

Finally, there is a discussion of the arguments concerning the relationship between the possibility of achieving moral autonomy and the individual's personality and intelligence when brought to the learning situation.

6. A GENERAL ANALYSIS OF THE 1970  
N.I.G.C.E. 'O' LEVEL PHYSICS  
EXAMINATIONS.

Martin, H. (1971).

A sample of 370 papers was analysed in terms of content, educational objectives and candidates' responses. The data obtained are considered in the light of comments made by teachers and the external examiner. Reformation of existing assessment procedures is suggested, based on a greater involvement of teachers. The author emphasises the importance of a precise statement of content to be covered and intellectual abilities to be developed in any course in relation to the design of an examination appropriate to the course.

7. THE NATURE AND FORMATION OF  
ATTITUDES IN RELATION TO THE  
NATURE OF HISTORY

O'Brien, B.T. (1970)

Part I moves from the theory of attitudes to their formation and then to a focus on group attitude. Part II examines what is historical truth, and Part III relates these two areas of scholarship, highlighting methodological and conceptual similarities.

8. A REVIEW OF EARLY CHILDHOOD  
AUTISM

O'Doherty, D.H. (1971)

The author describes the syndrome of infantile autism and emphasises the undefined character of the syndrome. A critical review is made of the more widely held theories on the aetiology or true nature of autism. The author suggests there may be a biochemical abnormality associated with this syndrome and critically examines the evidence on brain functioning.

The author examines the extent to which diagnosis of autism is valid and dependable and considers that the absence of agreement on diagnostic criteria creates problems for treatment. The existing services made by the N.S.A.C. in Britain are presented and the situation regarding assessment and placement examined. Irish facilities are also examined. The author considers it is the task of education to develop a teaching method to offer these children some independence. Operant conditioning techniques are examined in detail in this context.

9. A STUDY OF THE USE OF SIMULATION  
AND GAMES IN EDUCATION WITH SPECIAL  
REFERENCE TO GEOGRAPHY

O'Reilly, D.V. (1971)

A discussion of the concept of 'game' and 'simulation' as a teaching technique is preceded by an examination of the importance of games in child development.

The use of simulation and games in geography is described in some detail. One of the major advantages of this method is seen as the increased level of motivation they provide in the classroom. Present disadvantages are considered to be the scarcity of games available to teachers and the nature of the school timetable and organisation which makes it difficult to include games within a course of study.

The author carried out a small scale survey with 30 high school students in America, and a questionnaire on simulation and games was completed by 12 teachers.

10. ASPECTS OF ENVIRONMENTAL STUDIES  
IN THE UPPER PRIMARY CURRICULUM -  
A REVIEW OF DEVELOPMENTS WITH  
SPECIAL REFERENCE TO THE REPUBLIC  
OF IRELAND

McDonagh, D.G. (1970)

An historical account of the emphasis given to the subjects of an environmental nature since 1900 is discussed. Kerr's Curriculum Model and Bloom's Taxonomy of Educational Objectives provide a basis for an examination of the literature on environmental studies in Ireland. The concept of environment is examined from a general point of view and a conceptual systems approach is suggested as a realistic alternative to present pragmatic practices in classroom teaching.

An environment studies project conducted in a Dublin school, 'The Glenanear Experiment' is described as representative of the trends in environmental studies in Ireland.

11. EXPLANATION IN GEOLOGY

Parry, G. (1970)

A discussion on the teaching of geology in schools during the last 100 years is followed by an analysis of the function and objectives of geology as a school subject. The author suggests possible measures to improve the image of geology as a discipline, and presents arguments in favour of including geology as a science subject in secondary schools.

12. RELIGIOUS EDUCATION FOR  
SLOW-LEARNING ADOLESCENTS

Rawles, M.E. (1970)

Objectives and methods in teaching religious education are examined and related to the capabilities and needs of the slow-learning adolescent.

26 teachers of E.S.N. classes completed a questionnaire on their objectives, methods and problems in teaching religious education. The survey was carried out during the last week of the summer term and teachers were able to consider how they would change their course if they were starting again.

It was found that the teachers tended to state evangelical and moral objectives for the Religious Education of their slow learners, the teachers in voluntary Roman Catholic schools tending to give evangelical objectives more readily than teachers in state schools. The most frequently used types of material came from the New Testament, stories from life and current affairs and problems. The teachers indicated that pictures, display material and textbooks were used extensively in their teaching and that in special classes work in Religious Education was more likely to be planned to fit in with other areas of the curriculum. The replies suggested that the greatest problems in teaching religion to these children were a short attention span, a lack of abstract thought, and poor motivation. In general the teachers were satisfied with their objectives and the material they used in an attempt to achieve them, but many indicated that they might alter their methods of approach.

13. EXPLORATION INTO PEER GROUP VALUES AND FRIENDSHIP PATTERNS IN A GRAMMAR SCHOOL FIFTH FORM AND THEIR RELATIONSHIP TO EDUCATIONAL ACHIEVEMENT.

Reynolds, A.W. (1972)

During the 1960's there appears to have been a concentration of research in Britain on education and its relation to the working class. Detailed case-book studies of schools were published, and peer group values became a centre of interest. In 1970 Lacey investigated fully a northern grammar school in relation to its sub-cultures and friendship cliques.



There has been no similar study in Northern Ireland, where socio-economic and ethnic factors may differ greatly from those in the U.K. As deputy head of a co-educational day school it has been possible to explore peer group values and friendship patterns in a modest way. An attempt was made to find significant correlation between School Values (SV) and Inter-generational Conflict (IGC) scores obtained from a questionnaire, and subsequent academic achievement. Sociometric methods were used to explore friendship cliques.

Due to the small sample and the limited nature of the work, few results of significance were found, although trends were noted which would bear further investigation. The work can be considered as a preliminary study to precede major investigation.

#### 14. PRINCIPLES AND ORGANISATION OF COMPREHENSIVE EDUCATION IN THE REPUBLIC OF IRELAND

Spelman, B.J. (1970)

A brief resumé of the most notable influences characterising present change in Irish Post-Primary Education is followed by an historical treatment of the introduction of the comprehensive school system in the Republic of Ireland. It is traced from its initiation in 1963 to 1970.

A survey of the four state-built comprehensive schools carried out in 1970 was based on a modified version of the Benn/Simon questionnaire as well as tape recorded interviews with the heads and staff at these schools.

The survey includes details of the educational and social characteristics of the neighbourhood, the attitudes of staff and principals, liaison with other schools and parents, streaming, administration and social organisation in the school and details of the curriculum.

The study also includes a survey of a community school developed through the voluntary adaptation to the principles of comprehensive education by individual vocational and secondary schools which have pooled their resources and facilities and are subject to common or non-selective entry. This form of school is contrasted with the state comprehensive school.

Finally, the author provides a theoretical perspective on the principle and organisation of comprehensive education as expressed in the 5 schools included in the survey. Current trends in Irish education are deduced and related to parallel trends in other countries.

15. THE HISTORY AND DEVELOPMENT OF  
EDUCATIONAL BROADCASTING IN  
IRELAND

St. John-Brooks, C. (1971)

The philosophies underlying the educational systems of Northern Ireland and the Republic from Partition in 1922 are outlined, and their effect on those systems described. The Northern Ireland system is seen to have developed after the English model, with the child at the centre of the curriculum and authority delegated to the school principal and the LEA, in contrast with the highly centralised, restricted system in the Republic, based on primarily political and economic considerations. The implications for educational broadcasting of these different approaches are suggested.

The development of BBC school radio in the UK is traced from its inception in 1924, as is that of the School Broadcasting Council from its establishment in 1947. The structure and function of the latter are examined, together with some of its research methods. The four radio series produced exclusively for schools in Northern Ireland are described, and some of the advantages and disadvantages of the regional educational broadcasting service are discussed.

The growth of the BBC school television service from its experimental beginnings in 1952 is described, but it is pointed out that the first school television series in Northern Ireland was produced by UTV. This series and subsequent UTV series for schools are described. The use made of ETV by Northern Ireland teachers is examined, as are methods of teacher liaison. The BBC's ETV series for schools in Northern Ireland is described, and shortage of money is shown to be a particular problem in the development of the service.

The first radio programme to be broadcast in the Republic, in 1926, is described, followed by an account of the service run for schools from 1937 to 1941. Some reasons for the decision to discontinue it are suggested. The attempts made to restart the service, and their frustration by the Department of Education, are traced up to the present day.

The confusing financial and political circumstances in which Irish School Television (Telefis Scoile) was set up are described, and reasons given for the form it took. The growth of the service, its approach to its task, its methods and its degree of liaison with teachers are examined. Its gradual loss of autonomy and assimilation by the Department of Education are described, as are some of the implications of this development.

The author points out that the educational broadcasting services on both sides of the Border lack freedom. In Northern Ireland, a greater degree of financial freedom is desirable, while in the Republic Telefis Scoile is totally constricted by the Department of Education and its policies. It is suggested that, with more freedom, the two services would move closer together in approach.

16. ENGLISH AS THE TEACHING OF  
COMMUNICATION SKILLS

Wilson, G.L. (1970)

The literature on the teaching of English published during the last ten years is examined. The works of the theorists who rely largely upon deductions drawn from research are compared with the practitioners who rely on observation and experiments made during their own classroom teaching.

The author considers that nearly all the progress in the teaching of English in the United Kingdom was made by practitioners and that most of these practitioners have one special quality in common, which is a conviction that their main function as teachers of English in secondary schools is to teach the Communication Skills. A comparison is made between the opinions of English and American writers.

17. THE FUNDAMENTAL SIGNIFICANCE OF  
THE DISCIPLINES OF KNOWLEDGE FOR  
CONTENT OF SECONDARY SCHOOL  
CURRICULUM

Workman, R.H.B.

An enquiry into the nature of knowledge, given the escalation in the bulk of 'factual' knowledge with its possible lack of permanent authenticity, constitutes a major contemporary problem. The author examines the development of concepts and the manner in which knowledge is structured into discipline. The author considers that knowledge is a dynamic process and discusses the educational implications of this view for teacher, pupil methods and curriculum. He considers that the centrality of the disciplines of knowledge as curriculum content is the prime principle for effective general education of all secondary pupils.

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QUEEN'S UNIVERSITY BELFAST

DEPARTMENT OF EDUCATION

Summary of thesis presented in fulfilment of the requirements for the degree of Doctor of Philosophy.

18. AN INVESTIGATION OF HOMOGRAPHIC PROGRAMMING TECHNIQUES FOR TEACHING ELEMENTARY MATHEMATICS

Hawthorne, W.M. (1970)

The 24 homographic programmes described in the text have been designed by the writer to raise the standard of performance in mathematical skills already acquired by the pupil in the classroom situation.

The writer relates the homographic programming technique to programmed learning in general. Five investigations designed to assess the qualities of the homographic programmes are described. A comparison was made between the pre-test and post-test scores of two groups of secondary school pupils in which one group practised a skill with a homographic programme and a matched group used worksheets. The groups' post-test scores did not differ significantly.

The programme 'fractions' was tried out with 286 primary school pupils. Pupils of all levels of ability on the pre-test showed an improvement in the post-test which was significant beyond the 0.1 per cent level.

The three minor studies included an investigation of pupils' answers to a G.C.E. mathematics question, the use of the homographic principle in an examination, and an investigation into the effect of adding an extraneous stimulus to a programme.

DEPARTMENT OF EDUCATION

Summaries of theses presented in fulfilment of the requirements for the degree of Master of Arts.

19. THE DEVELOPMENT OF SECONDARY  
EDUCATION IN WESTERN NIGERIA  
1909-1960

Horgan, J.T. (1970)

The political background of Western Nigeria is described briefly. The influence of church and state on the development of educational facilities and the curriculum is examined, as is the changing reaction of the Nigerian peoples to formal education. The relationship of education to the total economy of a developing country is highlighted.

The writer carried out a survey in 1967 among 442 boys and girls from the final school certificate classes of 13 secondary grammar schools in Western Nigeria. The questionnaire examined students' scholastic ambitions, expectations and vocational aspirations. The evidence, in general, suggested that the expectation of the secondary grammar school leavers was not completely realistic.

20. THE TEACHING OF GEOGRAPHY IN  
THE SECONDARY (INTERMEDIATE)  
SCHOOLS OF NORTHERN IRELAND

McKeown, G. (1972)

The study has been presented in three parts. Part I gives a general background to the origin and development of geography as a field of learning, and N.I. secondary (intermediate) schools as the centres within which some of that learning has taken place in the latter half of this century.

Part II is concerned with teaching geography in schools. Aided by criteria supplied from a questionnaire distributed to Northern Ireland secondary (intermediate) teachers, an analysis was made of the aims and techniques adopted by these schools, so as to assess the role of geography in the present era.

Part III examined briefly the possible future trends of geography teaching in these schools.

21. INNOVATIONS IN THE TEACHING AND ASSESSMENT OF SCIENCE IN A BELFAST SECONDARY SCHOOL WITH PARTICULAR REFERENCE TO PROGRAMMED LEARNING AND TEAM TEACHING

Wilkinson, G.M. (1970)

The study was carried out within a large boys' non-selective secondary school. The first experiment was designed to analyse different testing procedures with a view of developing an efficient testing system for day-to-day use in the classroom. The subjects were 88 boys with a mean age of 15 years, who were following G.C.E. 'O' level courses in Physics and Chemistry. They each completed multiple-choice tests, the more traditional long answer and short answer open tests, a new type of open question test and at the same time the author evaluated the teachers' cumulative assessment of practical and course work.

The analysis of the results revealed that the short answer test was most efficient and the continuous practical assessments had potential for development.

The author suggests that a variety of frequent testing procedures would appear to be the best way of avoiding gross errors.

In the second experiment a linear programme was assessed for revision, remedial and teaching purposes. The subjects, 72 boys

aged 14, completed an objective test, questionnaire and a check list after using the programme. The retention of the content of the programme was found to be satisfactory but transfer of learning was unsatisfactory. 98 per cent of the pupils found the programme interesting.

The third study was an evaluation of team teaching with the first year pupils and seven teachers. Pupils' attitudes towards this method of teaching were investigated with a questionnaire and observational technique, teachers' opinions with an interview and pupil attainment with a test.



DEPARTMENT OF EDUCATION

Summaries of theses presented in partial fulfilment of the requirements for the degree of Master of Education.

22. A REVIEW OF ESN SCHOOL LEAVERS  
IN NORTHERN IRELAND WITH  
SPECIAL REFERENCE TO VOCATIONAL  
ADJUSTMENT

Davidson, S.I. (1972)

An examination of the employment histories and school records of 361 ESN special school leavers established the fact that in range of measured abilities and sex ratio, as well as in categories of work obtained, the Northern Ireland sample was remarkably similar to comparable groups studied in Great Britain. The examination further revealed that the range of employment available for girls was very limited, and that 57 per cent of the girls worked in factories. Fifteen per cent of the boys were reported to have obtained apprenticeships to various trades.

The 1967-69 leaving sample of 252 ESN pupils, for whom Youth Employment Service records of at least one year's duration were available, was studied in greater detail. Of this group 88 per cent of the girls and 85 per cent of the boys had been successful in obtaining employment.

The writer examined relationships between vocational adjustment (as indicated by status and duration of employment) and home and school variables.

The investigation revealed that I.Q., years at a special school and reading age jointly predicted status but not duration of employment, for boys and girls. The teachers' ratings of physical maturity were significantly related to employment duration for girls only and to

employment status for the whole sample. A higher proportion of girls than boys took up semi-skilled and skilled employment. The author details other relationships and describes an investigation into social adjustment among a sub-sample of the girls.

23. THE PERSONAL CHARACTERISTICS  
AND PERFORMANCE OF A GROUP  
OF COLLEGE OF EDUCATION STUDENTS  
Greenwood, J. (1972)

The author collected 9 sets of possible predictors of success for 245 students entering Stranmillis College in 1967. The information comprised 67 separate variables, including cognitive information (G.C.E. results and performance on the Valentine Reasoning Test), type of school, biographical details, results of the selection procedure (details of interview, head teacher rating), personality measures, interests, opinions measured on the Oliver and Butcher scale, and attitudes to teaching measured on the Minnesota Teachers' Attitude Inventory.

There were 5 criteria of success: the award of a degree or certificate; award with or without commendation; mark in final education examinations; mark in the student's other main subjects and final teaching practice grade.

The author found that no other set of predictors gave such a consistent indication of success in the education examination as the cognitive measures and of these the best single predictor was the total 'O' and 'A' level score. The best predictors of practical teaching performance were the ratings of intellectual maturity and ability in self-expression as assessed during the selection interview and by the head teacher.

24. THE CONSTRUCTION OF AN ATTITUDE SCALE TOWARDS MATHEMATICS AND ITS APPLICATION TO A SAMPLE OF NORTHERN IRELAND GRAMMAR SCHOOL PUPILS

Hayes, D.P. (1971)

After reviewing the various methods of attitude measurement the writer constructed an attitude scale towards mathematics. The scale was administered to 1294 pupils from second and fourth forms in 4 single-sex and 2 co-educational grammar schools. The style of mathematics teaching, mathematics attainment and intelligence test scores (11+ verbal reasoning) were obtained for a sample of these pupils.

In general, a less favourable attitude existed towards mathematics among form IV pupils as compared to form II pupils and girls were found to have a less favourable attitude to mathematics than boys. Further analysis showed little difference between the attitudes of girls educated in single sex and co-educational schools, but a significantly more favourable attitude to mathematics among boys in co-educational schools as compared to boys in 'boys only' schools. The percentage of pupils following A-level courses in mathematics presented an interesting corollary to the attitude test.

25. AN INVESTIGATION OF VARIABLES ASSOCIATED WITH VARIOUS FORMS OF CLASS ORGANISATION

Hutchinson, W.B.D. (1972)

The subjects for this study were 150 boys in three secondary schools. The author investigated the relationship between three forms of class organisation: streaming, banding, and mixed ability grouping; and a number of variables, including intelligence, socio-economic background, attitude to school, anxiety, aspiration level and sociometric status. Although some associations were found there was no confirmation of any consistent association between most of the variables and any one of the particular forms of class organisation.

26. A STUDY IN LOCAL EDUCATIONAL  
PLANNING AND DEVELOPMENT  
1965-1971

Johnston, D.H. (1971)

This study refers to the two-tier scheme of secondary re-organisation now operating in Co. Armagh, involving both County and Voluntary schools mainly in the Craigavon area. The scheme came into operation on 1st September, 1969, and, since statistical and other evaluative comparisons with the traditional tripartite secondary system will not be possible for some years, the study concentrates on the "Dickson Plan" as an experimental model, showing its evolution, detailed proposals and implementation over the first two years. The first chapter considers this comprehensive experiment in its context as part of the wider comprehensive movement in the United Kingdom, and summarises the development of secondary education in Northern Ireland since 1947. Chapter two is concerned with the origins of the scheme, the Dickson Plan in detail, and the parallel and quite separate system envisaged by the Roman Catholic voluntary managers. In the third chapter an account is given of the long and exhaustive consultations which took place, revisions of the Plan and of public opposition, and support, in the area. The implementation of the scheme 1967-71 is discussed in detail and in another chapter the operation of the scheme is described as it affects schools, pupils and staff. The Appendices include letters, statements, documents maps and statistics, derived from questionnaires and interviews.

27. SOME ASPECTS OF PHYSICALLY  
HANDICAPPED CHILDREN IN  
NORTHERN IRELAND

King, R. (1972)

Following a general survey of the literature on the cognitive, social and emotional consequences of disablement and their educational implications, the author examines the development of the educational facilities for the handicapped including the role of the voluntary

organisations and the assumption of responsibility by the Local Education Authorities. The present educational provisions for the handicapped are examined in three special schools. A survey of the 269 pupils attending these schools is described. The work of four hospital special schools is reviewed. Finally, the author reports on individual interviews with 24 adolescent pupils in one school with cameos of the education and subsequent lives of some handicapped adults for comparison.

28. SOME CHARACTERISTICS OF A  
GROUP OF BOY DELINQUENTS  
ADMITTED TO TRAINING SCHOOLS  
IN NORTHERN IRELAND

McConaghy, E.M.B. (1971)

The investigation was divided into two main sections, a general investigation of the home conditions and offences of 247 boys detained in two training schools, and a more detailed investigation of 133 boys in one of the schools. For these boys information was gained on their intelligence and performance in Arithmetic and Reading. The staff of the school completed the Bristol Social Adjustment Guide (B.S.A.G.) for each boy. An attitude scale relating to school was administered to 105 boys aged 16 or under in the training school and to a control group of 283 boys from a school for ESN pupils and non-selective schools.

73 per cent of the sample of boys were affected by adverse home circumstances. Among the delinquents there was an over-representation of intermediate children in families of three and four siblings. 21 per cent of boys who were from families of two or more siblings were born four or more years before the next sibling.

In the second stage investigation more than half of the delinquents were found to be 'disturbed' on the B.S.A.G.

There were no significant differences in attitude to school by delinquents and non-delinquents. The writer examined several

sub-groups of delinquents e.g. first offenders, absconders, the youngest boy admitted.

The writer considers that much of the confusion underlying the study of delinquents arises from the assumption that delinquents are a homogeneous group.

29. THOMAS HILL GREEN (1831-1882)  
AND THE DEVELOPMENT OF  
ENGLISH EDUCATION 1860-1880  
McQuade, D. (1971)

The contributions made by T.H. Green to education in the nineteenth century are assessed with particular reference to the congruence of his philosophical views, his belief in justice for all sections of the community and his practical educational achievements.

The progressive educational views expressed by Green are discussed in relation to the practices and beliefs of other educators at that time and also as compared to the development of educational facilities and practices in England.

30. ACHIEVEMENT IN NUFFIELD O-LEVEL  
PHYSICS RELATED TO INTELLIGENCE,  
CREATIVITY AND ATTITUDE TOWARDS  
SCIENCE  
Nicholl, C.J.F. (1972)

132 fifth form pupils who had taken the Nuffield Physics paper completed the AH4 test of General Intelligence, the Torrence Tests of Creative Thinking, the Science Opinion Poll, and a questionnaire designed by the writer. There were 4 measures of achievement in physics, the 'O' level physics grade, a score based on choice of 'A' level subjects, a score based on choice of career and whether or not a pupil was following an 'A' level physics course.

The results showed a positive correlation between intelligence and performance in the 'O' level physics examination. The most favourable attitudes towards science were expressed by pupils who obtained good 'O' level results, chose physics or other science 'A' level subjects and who expressed a preference for a scientific career. There was no relationship between performance in Nuffield 'O' level physics and the test of creativity.

### 31. PRIMARY SCHOOL HISTORY TEACHING

Shortt, J.A. (1972)

Questionnaires on the teaching of history were sent to class teachers (P4-7) in a stratified sample of fifty schools. 136 replies were received from 68 per cent of the schools. Teachers appeared to enjoy a very high degree of freedom in selecting material - only three had a compulsory scheme laid down by their principal. Apart from broadcasts, commonly used sources were traditional in tone (e.g. class texts, 'Programme for Primary Schools'). Pre-history and early civilisations were popular topics, especially with younger classes, later periods tending to be studied by the older children. Irish history was taken consistently with all age groups. A variety of themes (e.g. homes, transport) was also popular. Some mention was made of project work based on outings and use of the school environment.

Teaching method followed traditional lines. What might be termed a 'mainstream' approach to teaching history was discernible, i.e. a fairly well defined, chronologically orientated course supported by a variety of secondary sources. Within a mainly teacher-directed framework, individual interest was allowed to flourish in varying degrees. There was some esteem of local studies, a general appreciation of the imaginative value of stories and a high degree of linkage with other areas of the curriculum. Up to 30 per cent of the sample revealed in their comments a realistic awareness of young children's conceptual limitations.

32. SOME ASPECTS OF THE GENERAL  
ASSEMBLY AND RELIGIOUS EDUCATION  
IN PRIMARY SCHOOLS 1921-1971

Todd, H.L. (1972)

The changing role of the Presbyterian church is examined in relation to the Northern Ireland Education Acts, the programmes for religious education, the inspection of religious education in schools and the foundation of Stranmillis Training College.

33. THE COMMUNITY SCHOOL

Wilkinson, G.W. (1972)

An analysis of the antecedents of the community school is followed by a discussion of the definitions of community and the role of the community school. The concepts of the community school are examined in relation to their evolution in the United States. Three American schools which interact with their communities are described. A brief survey is made of the development of the Community School Ideal in England, and the interaction of school and community in three different English Environments is described. The possibility of the adoption of the complete ideal of the community school in the social educational and cultural climate of Northern Ireland is considered. The interaction, actual or potential, of three Northern Ireland schools with their communities is described.

34. AN EMPIRICAL STUDY OF VARIABLES  
RELATING TO READING DISABILITY  
IN A SECONDARY SCHOOL

Wilson, R. (1972)

87 girls and 82 boys were drawn from the 'A' and 'C' forms of the 2nd, 3rd and 4th forms of a mixed rural secondary school. All subjects completed the Vernon's Graded Word test, the Neale's analysis of reading, the Memory for Designs test, Raven's Progressive Matrices and the J.E.P.I.



The results showed that, as expected, the pupils in the 'A' streams were superior in reading and those in the 'C' stream group were retarded. There was a significant group difference for girls but not for boys on the Memory for Designs test. The retarded readers had significantly lower scores on the Raven's Matrices and tended to be more introverted and have higher 'psychoticism' scores on the J.E.P.I. The author concludes with a discussion of possible methods of remedial teaching.

DEPARTMENT OF PSYCHOLOGY

Summaries of selected theses presented in fulfilment of the requirements for the degree of Doctor of Philosophy.

35. AN EMPIRICAL AND THEORETICAL STUDY  
OF THE CONTRIBUTION OF A PHENOMEN-  
OLOGICAL THEORY OF PERSONALITY TO  
EDUCATIONAL AIMS AND PRACTICES

Miller, A. (1971)

The author is concerned with the theory of conceptual systems first proposed by Harvey, Hunt and Schroder. This theory emphasises the individual's personal interpretation of the world about him. This study collects the scattered information generated by the original statement of the theory of conceptual systems and empirically examines the view that individuals differing in conceptual level will interact differently with those around them (i.e. their parents, teachers, friends) and also will differ in their response to a complex problem. The subjects were one hundred pupils in the lower sixth form of a large co-educational secondary school. The author found that subjects differing in personality 'type' show distinct orientation and styles.

The implications of these findings are discussed in relation to educational aims. The modified theoretical model proposed by the author was found to be useful in outlining the educational practices which might be of use to the counsellor and teacher in the pursuit of these aims.

36. EDUCATIONAL PERFORMANCE AND  
THE ENVIRONMENT

Thompson, W.W. (1971)

The subjects for this study were a representative sample of some 400 7- and 10-year-old primary school children in Northern Ireland. Educational performance was measured at both ages by objective group tests of intelligence, reading and mathematics. As well as test scores each pupil was scored on a brightness and backwardness dichotomy for each test.

The Home, Neighbourhood and School environment of each pupil were measured by 95 individual variables. This information was collected using structured questionnaires. All parents were interviewed in their homes. The environmental data were reduced by factor analysis to thirty composite environmental variables. The relationships between environment and educational performance were examined, using multiple regression and factor analyses. The results of this study revealed much environmental interaction and many associations were highlighted. The major findings relating to the Home environment were that the Home is much more closely associated with educational performance than is the School and within the Home the Parents rather than the material surroundings were the important influences. Parental educational behaviour rather than their beliefs were found to be the important predictors of educational performance.

Within the School environment the organisational variables, notably informal teaching methods, good social atmosphere and regular homework, were more important than the physical surroundings.

37. A DISCUSSION AND EXPERIMENTAL INVESTIGATION OF ENVIRONMENTAL INFLUENCES ON THE DEVELOPMENT OF THE PERCEPTION OF SPEECH

Trew, K.J. (1971)

The author reviews the theoretical and experimental findings relating to Bernstein's work on linguistic codes and concludes that the evidence tended to support Bernstein's viewpoint.

Two exploratory investigations were carried out to examine the proposal that in the restricted code to varying degrees, the non-verbal channels of communication become objects of special perceptual activity, while in the elaborated code it is the verbal channel that becomes the major source of information.

The first experiment compared the symbolic size function of non-verbal vocal signals e.g. pitch as compared to verbally derived signals (nonsense syllables). Children in four age-groups (5, 7, 9, 14) were tested. The subjects' responses were found to differ according to age and not social class. However, the subjects did not treat the nonsense syllables as verbal units but as sounds.

The second experiment was an investigation of the emotive function of non-verbal signals (tone of voice and facial expression) as compared to verbal cues (nonsense syllables) in a situation in which children were asked to decide which of two sweets they preferred. Children in four age groups (5, 7, 9, 14) were tested.

The middle-class subjects tended to respond to the verbal and non-verbal cues, while the working-class subjects responded to the non-verbal cues. In addition, there were differences in patterns of responding at different age levels.

The author observes that the implications of subcultural differences in the utilization of non-verbal channels of communication are especially relevant to communication in the classroom and in all other situations where the middle-class adult has to communicate with a working-class child.

DEPARTMENT OF PSYCHOLOGY

Summaries of theses presented in fulfilment of the requirements for the degrees of Master of Arts and Master of Science.

38. A STUDY OF DIFFERING WAYS OF IMPLEMENTING REMEDIAL INTERVENTION IN RELATION TO READING STANDARDS AMONG PRIMARY SCHOOL CHILDREN IN A LOCAL EDUCATION AUTHORITY

Booth, V.H.A. (1972)

This investigation was in two parts, a survey to discover the incidence of reading failure in the L.E.A. and an examination of the relative efficiency of two different methods of remediation.

A random ten per cent sample of the pupils within the L.E.A. born in 1960 were given the Neale Analysis of Reading Ability in 1967 and retested in each of three subsequent years using alternate forms of the test.

Girls scored higher than the boys at each year of testing, with the exception that by the third year boys in county primary schools had overtaken county school girls in reading comprehension.

In 1967, there was a small difference in the scores on reading accuracy and comprehension of county and voluntary pupils, with the latter at a disadvantage. This persisted with the girls but widened with the boys. The author advances some possible explanations for the obtained divergence.

108 retarded readers were identified from the 1967 and 1968 survey data. These pupils were assigned to one of three treatment groups, a control group which received no special remedial treatment, an intensive group receiving daily remedial tuition during one school term, and an extensive group receiving twice weekly tuition over one

school year. These pupils were assessed on four occasions, the final one being 18 months after tuition ended, using the Neale Analysis.

It was found that retarded readers benefited from remedial intervention and that long-term results favoured intensive remedial tuition. The author draws from the evidence in his own study and that in other sources to devise a programme of preventive and remedial education.

39. SOME ASPECTS OF VOCATIONAL  
DEVELOPMENT IN IRISH MALE  
ADOLESCENTS

O'Connor, E. (1971)

Following an historical introduction to vocational psychology the concept of vocational maturity is examined. This concept was examined with 317 boys aged 14 to 18, selected from 4 Dublin secondary schools. The author used a questionnaire adapted from an American instrument, an interview and the Vocational Development Inventory (VDI) to obtain eight measures of vocational maturity. In order to examine variables thought to be associated with vocational maturity each subject completed a personality test (the HSPQ), an intelligence test (AH4), a level of aspiration test and supplied information on their home (size of family etc.) and school placement. The adolescents' views on school work and leisure were also assessed through information gained from the questionnaire. A follow-up study was made of those subjects who subsequently left school in order to determine whether their educational and occupational aspirations coincided with reality one year later.

40. LATERALITY: ITS INCIDENCE AND  
ASSOCIATION WITH READING IN  
PRIMARY SCHOOL CHILDREN

Khanna, S. (1971)

A review of the literature on laterality, and its relationship to reading is followed by an investigation which used thirteen measures to assess lateral preferences (hand, eye and foot) of seven- and eight-year-old primary school children. 123 children were tested individually. The Neale Analysis of Reading Ability was administered to obtain reading accuracy, comprehension and speed scores for each child so that the possibility of an association between laterality preferences and these skills could be studied. As the literature indicates considerable variety in the methods of determining these preferences, three further tests of native handedness were included to explore their suitability for this purpose. These were direction of hair-whorl, extensibility and synkinesia of hands.

No significant relationships were found between children's reading achievement (accuracy, comprehension and speed) and lateral preferences. No significant sex differences were obtained. Children with left hand or left eye preferences did not show superiority in mirror reading over children with right hand or right eye preferences.

Of the three additional tests of handedness, measures of extensibility and synkinesia appeared to be reliable tests.

DEPARTMENT OF PSYCHOLOGY

Summaries of theses presented in partial fulfilment of the requirements for the degree of Master of Science in Developmental and Educational Psychology.

41. AN EXPERIMENTAL INVESTIGATION  
INTO THE DIRECTIVE FUNCTION OF  
THE WORD IN THE INSTITUTIONALISED  
SUBNORMAL

Cole, R.A. (1972)

Luria's work on language development has shown that the part played by language in regulating the severely subnormal's behaviour is very small because of the dissociation of verbal and motor systems. An experimental investigation was undertaken into the directive function of the word in 11 male and 11 female institutionalised subnormal adults, in which the effects of verbal, non-verbal and mixed verbal, non-verbal instructions on a choice reaction time task were evaluated. The results were interpreted as suggesting that the directive function of the word was operative in this experimental situation.

42. STIMULUS COMPLEXITY AND ITS  
RELATION TO STATED PREFERENCE  
VIEWING TIME AND INTELLIGENCE

Davey, E. (1972)

30 schoolboys aged 5-8 years were assigned to three groups equated for age and intelligence. 2 of the groups were given visual perception training consisting of sorting and matching activities. The third group served as a control. All subjects individually performed a viewing time task and a preference task with patterns of varying levels of complexity prior to and after the different sessions.



The training procedure did not result in the choice of patterns with higher levels of complexity, nor did it reduce the subjects' total viewing time. For all subjects there was a decrease in viewing time from pre- to post-training. Intelligence was not significantly related to performance, but a trend for high I.Q. and low I.Q. subjects to diverge as complexity increased was noted.

43. AN INVESTIGATION INTO THE EFFECTS OF THREE DIFFERENT TYPES OF SPECIAL EDUCATIONAL PROVISION ON THE EDUCATIONAL ATTAINMENTS OF EDUCATIONALLY SUBNORMAL CHILDREN OF TWO DIFFERENT AGES

Derwent, C.M. (1971)

Male subjects aged 11 and 13 years were selected from a special school, a special class within a non-selective secondary school and an ordinary class by means of Raven's Matrices and the Mill Hill Vocabulary Scale. The 10 lowest scorers on both tests at each level were selected from each type of educational placement to form six groups, each of which was given an arithmetic and reading test.

Analysis of co-variance with intelligence as the co-variate revealed a clear trend for children in the two ordinary classes to score higher (when intelligence is controlled) on tests of reading and arithmetic attainment than the children in the special class, followed by special school children.

The author hypothesised that over a period of two years the increase in educational achievement in the three environments would be greatest for the special school. This was refuted. The results of this study indicate that educational placement operates optimally not for the special school group but for children of low intellectual ability in the normal class situation. However, analysis of type errors and reading rates showed greater carelessness in reading by the normal classes, suggesting less adequate instruction in reading aloud than in the special school.

44. AN INVESTIGATION OF SUPERSTITIOUS BELIEFS IN PRIMARY SCHOOL CHILDREN AND THEIR CONCEPT OF LUCK

Elliot, M.A. (1971)

A questionnaire of 15 short stories involving situations with superstition and logic influencing outcomes was administered with the Junior E.P.I. to 2 classes of 8-year-olds and 2 classes of 10-year-olds. The pupils who failed to answer 2 logical questions accurately were rejected and the rest put in order of level of superstition. The top and bottom ends of this group were tested for self-confidence. The children varied in their level of superstitious belief. The overall pattern suggested that children would respond to superstition if it could have an influence without actually defying logic. This was especially so if superstition promised a favourable outcome. There was a relationship between neuroticism and superstition in the 10-year-olds but not the 8-year-olds. There was no significant difference in the self-confidence of the superstitious and non-superstitious children.

45. THE EFFECTS OF BIRTH ORDER, FAMILY SIZE, ETC., UPON INTELLIGENCE AND SOCIAL ADJUSTMENT

Fee, M.V.P. (1972)

The subjects for this experiment were 16 first borns, 16 intermediate children, and 16 last borns in their first year at primary school. Each category contained equal numbers of boys and girls.

General intelligence and verbal ability were assessed using 2 non-verbal tests and 1 verbal measure. Social adjustment was assessed by a social maturity scale, teachers' ratings, and by observational measures categorising behaviour in free play situations. A further index of social adjustment was obtained from peers' sociometric judgements in response to group photographs.

As expected, no difference in general intelligence between the categories was found. Contrary to many researchers and to theoretical implications first borns were not verbally superior.

In social adjustment, first borns were rated by their teachers as most independent. Later born children were rated higher for co-operation, affiliation and sociometric status and observational measures showed first borns to be the least co-operative group. Peers' judgements showed last borns to be most popular. Indications were that later and last borns had a higher level of social adjustment.

Sex differences were considered. Significant differences were found only in behavioural measures. Girls were more co-operative in play and engaged less in negative and parallel play than did boys.

46. THE USE OF THREE CONDITIONING TECHNIQUES IN THE TREATMENT OF NOCTURNAL ENURESIS WITH EDUCATIONALLY SUBNORMAL CHILDREN

Green, L.R.V. (1971)

The subjects were 33 children aged 8-16 years in a residential school for educationally subnormal children, all of whom suffered from nocturnal enuresis. They were compared with 33 non-enuretic subjects on tests of maladjustment, social adaptation and family relations. It was found that the enuretics were markedly more maladjusted than the control group - but there was no significant differences in the social adaptation scores. The author suggests this may be an artefact of the institutional setting in which nocturnal enuresis is fairly common. There were no differences in the family relations test but enuretic children were visited less often by their parents.

A study was performed to compare different types of treatment with the enuretic children. In each case the children were told that the treatment, a biscuit, water play or being taken to lavatory one

hour after bedtime, would stop them wetting the bed. No significant differences were found in wet nights per child during the control and experimental periods, nor between the first and last five days of experimental treatment. The author commented that a longer, more detailed study in this area is required.

47. AN ATTEMPT TO MODIFY THE  
RESPONSE PATTERNS OF  
REFLECTIVE AND IMPULSIVE  
CHILDREN

Harbison, J. (1972)

A series of investigations by Kagan et al. in 1964 have revealed a stable psychological dimension which they have called impulsivity/reflectivity. This dimension describes the response patterns of children who are quick and inaccurate (impulsive) or slow and accurate (reflective). Impulsive children have been shown to be at a disadvantage in certain aspects of the educational process. Recently a few studies have indicated the possibility of modifying the response patterns of impulsive children and a number of procedures have been suggested. The present study was an attempt to modify the behaviour of 36 reflective and 36 impulsive twelve year old boys. A variety of modification procedures, manipulating response time and strategy, were used and the efficacy of these assessed. The results demonstrated the differences in performance between the reflective and impulsive groups. Only the response time of the impulsives was shown to be differentially affected by the procedures used. Some possible explanations for the absence of significant effects and suggestions for further research are presented.

48. A STUDY OF SOME EFFECTS OF  
SCHOOL ORGANISATION UPON THE  
ATTAINMENT OF FIFTH YEAR  
PRIMARY SCHOOL CHILDREN

Irvine, S.R. (1972)

One school representing each of three types of curriculum organisation was selected for study, i.e. a very progressive (informal school), a very traditional (formal school) and a school which sought to keep a balance between the two (a 'mixed' school). The schools were equated for size, socio-economic status, age of building, age and experience of teaching staff, etc.

The Head Teacher in each school was asked to provide a list of educational objectives which the school held for its pupils and on the basis of these, four measures of cognitive skill were selected on which to compare the effectiveness of the three methods. Forty-eight children in their fifth school year ( $8\frac{1}{2}$  to  $9\frac{1}{2}$  years), drawn from at least two classes in each school, took part in the investigation.

Analysis of the data revealed that the subjects in the traditional school achieved significantly better scores on the reading test and tests of computation and number fact than the subjects in the other two schools. The progressive school subjects and those in the traditional school were significantly superior to the mixed school in a test of mathematical understanding. On a test of 'study skills' (the ability to make judgements, draw inferences and go beyond the information given) subjects in the progressive school were significantly superior to those in the other two schools. The performance of subjects in the mixed school was generally inferior to subjects in the other two schools.

49. THE FREE RECALL OF  
YOUNG CHILDREN

Marshall, A.T. (1971)

The material for this study was a list of 16 items consisting of 4 instances belonging to each of 4 categories (animal, clothes, body, fruit). 160 subjects aged 5 and 8 years were randomly assigned to 8 groups. 4 groups received the items in random order and 4 in blocked order. The effect of cueing via categories on recall was examined in a  $4 \times 2 \times 2 \times 2$  design. The four cueing conditions were non-cued, cued before, cued after and cued before and after. The subjects were required to recall the list freely after a single presentation.

Cueing did not affect recall or organisation ratios at either age. Superior recall was shown by 8 year olds, by boys and under blocked presentation.

The author examines the relationship of these findings to previous theoretical and empirical studies.

50. ADOLESCENT GIRLS' PERCEPTION  
OF PARENTS AND TEACHERS

Mulholland, A.J. (1971)

A random sample of 240 12 and 15 year old girls were selected from voluntary and county grammar and non-selective secondary schools. The subjects completed Thurstone's Primary Mental Abilities Test, a questionnaire with attitude items relating towards their parents, the J.E.P.I. and a questionnaire designed to elicit attitudes to teachers. Analysis of variance results indicated significant differences in the attitude of the younger and older groups of girls, the younger group tending to conform more to parental values and norms than the older group. There were no significant differences in the 2 age groups' attitudes towards teachers.

Significant correlations were found between the attitudes of the younger age group and the personality factor of Neuroticism.

51. PARENTAL INTERACTION OF THE  
IRISH ADOLESCENT BOY

O'Ceallaigh, S. (1971)

150 boys in two suburban Dublin grammar schools completed the verbal meaning and reasoning sub-tests of the S.R.A. and a 90 item questionnaire designed to examine attitudes relating to parental involvement in leisure, discipline and socio-personal variables. The boys were aged 12-13 and 15-16, half designated middle-class and half working-class.

There were no significant differences in the attitudes of the subjects towards their parents due to age, socio-economic status or type of school.

Previous research has shown that as the adolescent gets older there is increased alienation from parents and the development of independence. The author considers the results in this study may have been confounded by the limited age range.

52. DISCRIMINATION LEARNING IN  
THE MENTALLY SUBNORMAL

Ogle, M. (1972)

The experimental group consisted of 24 organically defective (mongol) children. They were matched on mental age with a control group of 24 normal children. In a series of 4 studies the author examines or controls 5 aspects of the experiment reported by Harter, Brown and Zigler (1971) on discrimination learning. They used two conditions of reinforcement, penalty and reward (P + R) and initial reward only (I.R.). They found that normal and familial retarded subjects showed better learning in the P + R condition than in the

I.R. condition, whereas the organic retarded subjects did not. When factors such as difficulty of perceptual discrimination, and position preference were controlled the significant difference in performance of the mongol children as compared to the normal children was not related to the type of reinforcement. Generally the P + R condition was not found to result in better performance than the I.R. condition, but it was the shift to a different reinforcement condition, P + R to I.R. or I.R. to P + R, which was found to be the crucial factor.

53. PROBABILITY: AN INVESTIGATION  
OF THE BEHAVIOUR OF ADOLESCENTS  
IN A SEQUENTIAL, TWO-CHOICE  
SITUATION

Pinkerton, E.M. (1971)

160 boys and girls aged 12 and 14 years, and of above average and below average intelligence, were asked to predict which one of two stimulus events (picture of a large or a small dog) would appear next in a pack of 100 cards. The events occurred in the ratio 70:30 and were randomly distributed. Only half the subjects (the instructed group) were told about this randomness. The Junior E.P.I. was administered to all subjects.

It was found that there was a significant effect of instructions only for the low intelligence 12 year old subject. The failure to show a facilitative effect of instruction for other groups was contradictory to the expected result. An analysis of the strategy used by the subject pointed to the existence of a relationship between choice behaviour and cognitive capacity.

The need for further research was emphasised before any definite findings could be discussed with regard to the sex and personality variables.



54. THE EFFECT OF PUNCTUATION  
ON READING COMPREHENSION

Rafferty, H. (1972)

80 boys and girls, aged 9 and 11, were randomly assigned to four groups. Each child in each group was tested individually on Form C of the Neale Analysis of Reading Ability. Form A was presented on a different day with 4 variations - no intra-sentence punctuation, no inter-sentence punctuation, no punctuation and added punctuation. The groups were compared for accuracy, time and comprehension under the 4 conditions.

Analysis of covariance showed no differences between the groups on any measure. The author considered there was little evidence to support the view that the experimental procedures and analysis militated against a positive result. He considered that the subjects appeared to have the ability to make sufficient use of linguistic cues to organise their input into meaningful units.

55. SOCIAL CLASS, LANGUAGE  
AND MEMORY

Rooney, T.S. (1972)

Language differences have been demonstrated between working-class and middle-class children. Inferences as to the effects of language differences on cognitive performance have all been derived from the language performance itself. This study attempted to infer the effects of language differences on cognition from performance on a limited range of cognitive tasks.

Six memory tests (5 short-term memory tests and 1 long-term test) were administered to two groups of 10 year old children; a working-class and a middle-class group matched for non-verbal intelligence. Four of the tests involved linguistic material (words, sentences, a prose passage); two of the tests involved non-linguistic material (digits, animal figures). Speech samples, elicited from all

30 subjects, were analysed to show that the speech of the working-class and the middle-class group could be identified with a restricted code and an elaborated code respectively.

No significant differences were found between the groups on 5 of the memory tests while the working-class group scored significantly higher on the non-verbal visual memory test (animal figures). The results were interpreted as indicating that the restricted code of the working-class group did not detrimentally affect performance on the memory tests used in this study in spite of the linguistic nature of the material involved in most of the tests.

It was concluded that there is insufficient empirical evidence to justify the assumption that the language of a working-class child observed in an experimental situation is the whole of the child's linguistic performance or representative of his linguistic competence and that observed social class speech differences necessarily reflect differences in cognitive ability.

56. READING AND SHORT TERM  
MEMORY (S.T.M.)

Thompson, W.T. (1972)

A group of 24 good readers and a group of 24 poor readers were selected from 76 P5 boys in a large L.E.A. school and tested for short-term recall of digit lists presented by three different methods, auditory, visual serial and visual simultaneous, at 0, 5 and 10 seconds after presentation. Intelligence was controlled by using scores obtained from Raven's Matrices as the co-variate in an analysis of co-variance, and the levels of reading ability were measured on the Neale-Analysis of Reading Ability. Good readers were found to have significantly better recall than poor readers for serial presentation but not for simultaneous presentation. The relationships between reading and S.T.M. were found to be quite complex; it would seem that for poor readers, good S.T.M. relative to the group's norm will

facilitate reading, while for good readers there is no positive relationship between reading and S.T.M., indicating perhaps a curvilinear relationship in which only poor S.T.M. scores are predictive of reading ability.

57. THE EFFECTS OF METHOD OF PRESENTATION ON CLUSTERING IN THE FREE RECALL OF THE SUBNORMAL

Wilson, J. (1972)

Groups of 32 subnormal and 32 normal children matched on mental age were presented with pictures of objects drawn from three categories. In one condition the pictures were presented simultaneously in random array; in the other, pictures from three categories were presented successively in pairs, no pairs being from the same category. In the random presentation condition both groups clustered material at above chance level, the normals being superior. In the blocked presentation condition the clustering of both groups was reduced, that of subnormals to below chance level. Differences in the amount recalled by both groups were not significant under either condition. In neither group was the correlation between the amount recalled and clustering significant. It was concluded that the clustering ability of subnormals is fragile and can easily be disrupted by changes in presentation of material.

58. THE INFLUENCE OF CERTAIN ASPECTS OF CHILDREN'S BEHAVIOURAL STYLES ON THE TEACHER'S ESTIMATION OF THEIR INTELLIGENCE

Whyte, J. (1971)

Two classes of children, aged 6.4 - 7.4, from each of four primary schools, constituted the sample. The teachers were all female and all had between 5 and 20 years of teaching experience. The teachers rated their pupils on Attention Span and Quality of

Participation and Activity Level at the same time as the children attempted Schönell's Mechanical Arithmetic Test. Four weeks later, the teachers rated the pupils on their General Mental Ability and re-rated the children's Quality of Participation. At the same time the children were given the Young Intelligence Test for Non-Readers.

One of the main findings was that high ratings on Participation and Attention Span were correlated with high ratings on General Mental Ability. It was also found that girls tended to be ranked higher than boys on these two non-intellectual variables. The number of changes made when teachers re-rated Participation indicate that Participation as a trait is dynamic in some children but stable in others.

59. THE SELF-CONCEPT AND  
SPECIAL EDUCATION

Young, A. (1972)

The self-concepts of E.S.N. boys were examined in relation to level of segregation (residential school or special class), duration of special educational treatment and the degree of subnormality at the time of placement. These boys were matched for age and L.E.A. with a control group of academically average students.

There were significant differences in the behaviour of groups due to length of placement and level of segregation ( $p < .01$  and  $p < .001$  respectively). The residential school group had more positive self-concept scores than the control group ( $p < .001$ ) but did not differ from the special class group. The special class group did not differ from the control group.

The author also measured teachers' attitudes to average and exceptional children in order to test the theoretical view of Lewis (1970). He postulated a polarisation of teacher interest in scholastic extremes to account for low self-concept scores of average pupils. The teacher attitudes were examined in relation to stage in teaching

career (college of education student or full-time teacher), sex and type of teaching (primary or secondary).

There were no differences between the groups and the mean attitude score of the combined groups was less than the neutral point ( $p < 0.001$ ), which did not lend support to the polarisation hypothesis.

It was concluded that the residential special school facilitated positive self-concepts, whereas the special class did not. Contributory factors are discussed as are possible mechanisms responsible for the lower scores of the control group.

DEPARTMENT OF PSYCHOLOGY

Summary of a selected thesis presented in partial fulfilment of the requirements for the degree of Master of Science in Abnormal Psychology.

60. AUDITORY SYNTHESIS AND AUDITORY-VISUAL INTEGRATION IN READING DISABILITY

Scott, P. (1970)

The literature relating to the nature and causation of reading difficulty is reviewed.

In the experimental study 34 nine-year-old boys were divided into two groups. All were within the I.Q. range 90-110 on the Otis Group Intelligence Test but the control group were average readers and the reading age of the experimental group was at least 18 months less than their chronological age on The Neale Analysis of Reading Ability and the Holborn Reading Scale.

The experimental task consisted of dichotically presented digits and words, e.g. presentation of '2' to the left ear and simultaneous presentation of 'but' to the right ear, followed one third of a second later by '-ter' to the left ear and '4' to the right ear. The subjects had to select the correct word from a list of four and report the numbers. There were 10 sets of 2 digits, and 2 syllables and 10 sets of 3 digits and 2 syllables. In the second part of the study subjects heard a set of 'tap' patterns after which they were shown 3 sets of dots on a sheet, one of which corresponded to the temporal distribution of the taps.

It was found that average readers gave significantly more correct words and syllables and were better at the auditory-visual tasks. The author proposes several explanations for his findings.

DEPARTMENT OF PSYCHOLOGY

A selected list of theses accepted in partial fulfillment of the requirements for the degree of Bachelor of Arts and Bachelor of Science.

61. SOCIAL CLASS AND SYNTACTICAL FACILITATION IN THE RECALL OF NONSENSE SYLLABLE STRINGS

Boyle, T. (1972)

Two groups of ten-year-old children, from different social class backgrounds but matched on IQ, were tested for recall on a series of nonsense syllable strings. In two experimental conditions the nonsense syllables were placed in a sentence frame. They were randomly rearranged in the third. There was no significant interaction effect of social class by experimental condition. However, there were main effects for social class and for experimental conditions. The experiment did not support the hypothesis that the middle class group would show greater facilitation in recall over the working class group due to the addition of syntactic structure as a cue. Both groups showed facilitation in recall when the nonsense syllables were placed in a sentence frame.

62. AN INVESTIGATION INTO THE EFFECTS OF MANIPULATION, COMPENSATION AND REVERSIBILITY TRAINING, BOTH SEPARATELY AND IN COMBINATION ON THE ACCELERATION OF CONSERVATION OF MASS

Crooks, S.H. (1971)

102 children were tested on 6 equivalence conservation tasks. Subjects who were conservers and consistent nonconservers (subjects who understood 'some' and 'more' but failed to conserve) were

administered the Peabody Picture Vocabulary Test.

28 nonconservers were matched into 8 groups (comparable on M.A. and C.A.) for training. A 2 x 4 design was used. Half the subjects were given training in which they carried out the transformation themselves (the manipulation condition) and half merely watched the experimenter perform the transformation. Training consisted of either the cognitive operations of compensation (that what is gained in length, for example, is lost in height) or reversibility (that the transformed object can be changed back into its original form) or a combination of the two performed on four conservation tasks. Following training, subjects were tested on a post-test identical to the pre-test. A control group was provided.

The conservers were found to have consistently older chronological and mental ages as well as higher IQ scores than the nonconservers. Piaget's view that conservation is not dependent on a measure of general intelligence functions was not supported. Training produced an overall significant effect, with subjects trained under manipulation conditions conserving on significantly more items.

63. THE EFFECTS OF SOCIAL CLASS AND INSTRUCTIONS ON THE ABILITY OF TWELVE YEAR OLD BOYS TO EXPLAIN SIMPLE TASKS TO THEIR PEERS

Davies, P. (1972)

Four experimental groups were selected i.e. two groups of Explainers and two groups of Learners. Both groups of Learners were working class while one group of Explainers was working class and the other middle class. The Explainers had to explain two 'origami' tasks to the Learners i.e. how to make a paper hat and how to make a paper boat. The explanations of the tasks given by the Experimenter to the Explainer were varied. One of the tasks was explained to the



65. HOW CHILDREN UNDERSTAND  
SENTENCES: AN EXPLORATORY  
STUDY

Dewart, M.H. (1971)

Forty-four subjects were used, twenty-two from the P.2 class of each of a working- and middle-class school. The experiment was in two parts. In part I subjects manipulated two toy cars, one fixed, one mobile, to correspond to sixteen sentences spoken by the experimenter. In part II subjects manipulated two hand puppets to correspond to the experimenter's sentences. A measure of IQ was obtained using the Peabody Picture Vocabulary Test. IQ scores were related to performance in both part I and part II.

Results showed that significantly more errors were made on passive sentences by working-class as opposed to middle-class subjects. On active sentences the difference was not significant. IQ score was related to level of performance on both part I and part II. IQ differences between social class groups were not significant.

Results of part I suggested that comprehension of the sentences was related to the extralinguistic situation (i.e. to whether the grammatical subject corresponded to the fixed or to the mobile car) and is easier when the perceived actor in the situation corresponds to the logical (or deep structure) subject of the statement. It is suggested that the pragmatic function of language should not be overlooked by the generative theories of language learning and understanding.

Social class differences obtained support to some extent. Bernstein's theory of a restricted code but question his belief that there is no difference between social class groups in their basic understanding of the linguistic code system. They also suggest that Chomsky's hypothesised competence, shared by all members of a linguistic community, must be restricted merely to cover all mature members.

66. A STUDY OF THE EFFECT OF  
FAMILY SIZE ON LANGUAGE  
DEVELOPMENT AND INTELLIGENCE

Eastwood, M.S.V. (1971)

15 pairs of primary school children, one in each pair from a large family and the other from a small family, were matched on their scores on Raven's Progressive Matrices. Each child was tested on the WISC vocabulary sub-test and a concept sorting task.

The only significant difference between the groups was found on the vocabulary test. The author comments that the results were confounded by social class differences between the groups.

67. MODIFICATION OF IMPULSIVITY IN  
CHILDREN BY SPECIFIC INSTRUCTION  
AND COLOUR CUE

Ferguson, D.J. (1972)

The Raven's Progressive Matrices and the Matching Familiar Figures (M.F.F.) Tests were completed by 52 children aged 9-11 years. The M.F.F. is a measure of impulsivity/reflectivity. 12 boys and 12 girls were selected as impulsives. They had low latency and high error scores on the M.F.F. test. The subjects were randomly assigned to one of the four experimental groups. All groups were given practice either with or without colour cues and with or without specific instructions. All subjects completed a post-test on the M.F.F. and Raven's Matrices.

There was a significant increase in latency and decrease in errors from pre- to post-test for all subjects, regardless of training. The training did not result in a significant improvement on Raven's Matrices.

68. THE EFFECTS OF VERBAL LABELS  
ON THE DISCRIMINATION/REVERSAL  
PERFORMANCE OF MONGOL AND  
NON-MONGOL SUBJECTS

Gupta, A. (1972)

Two matched groups of 8 mongol and 8 non-mongol retardates were tested on a Word Discrimination Test and a size/form discrimination task using familiar objects where size was the relevant dimension. After each trial, whether correct or incorrect, half of each group were asked to look at the correct stimulus and half were asked to name it.

Verbalization was shown to have a facilitatory effect on discrimination learning but not on reversal. There were no significant differences between mongols and non-mongols on the discrimination task, but there was an indication that the use of language is less highly developed for mongols than for non-mongols of the same mental age.

69. AN INVESTIGATION INTO THE  
PERFORMANCE ON THE PORTEUS  
MAZE TEST AND THE VERBAL  
HALF OF THE W.I.S.C. OF A  
DELINQUENT GROUP AND A  
NON-DELINQUENT GROUP

Hall, P.M. (1971)

The subjects were 25 delinquents, thieves aged between 12 and 15, matched for sex, age and socio-economic status, with a group drawn from an inner-city secondary intermediate school. Each subject completed the verbal half of the W.I.S.C., a performance test, the Porteus Maze Test and a personality test, the J.E.P.I.

The delinquent group was found to be significantly less extraverted, but more neurotic than the controls. There were no differences on the Porteus Maze Test. In fact, the controls scored above the delinquents, which was a reversal of the hypothesis derived from the

literature. The author suggests that the results obtained in this study are consistent with the view that delinquency is a social problem rather than a factor of personality.

70. LEARNING, REMEMBERING AND INTELLIGENCE IN NORMAL AND RETARDED CHILDREN

Hanna, J. (1971)

The subjects were 20 normals and 20 non-institutionalised retardates. The rotary pursuit task was used. The two groups were subdivided, one subgroup receiving a retention test one day after the learning trials, while the other subgroup was tested after 28 days.

The normal group performed better than the retardates on the acquisition and retention of the task but there was no significant difference in reminiscence. The theoretical implications of these results are examined.

71. AN INVESTIGATION INTO DAY-DREAMING IN ADOLESCENTS

Henshaw, J. (1972)

A 'daydream' questionnaire of 55 items was constructed and administered to 25 girls and 24 boys, aged about 14 years, along with three subtests of the S.R.A. test of Primary Mental Abilities to obtain intelligence scores. A significant positive correlation was found between intelligence and frequency of daydreaming.

Additional significant relationships were discovered concerning especially frequency of nightmares and spare time activities. Some sex differences were found.

The study gave some support to the idea of daydreaming as a measure of 'self-awareness'.

72. THE EFFECTS OF QUESTION AMBIGUITY AND TRAINING ON THE ABILITY OF 5 AND 6 YEAR OLD CHILDREN TO SOLVE CLASS INCLUSION PROBLEMS.

Kennedy, S. (1972)

The experiment investigated the Class Inclusion Operation, an operation defined by Piaget (1952) as 'the ability to compare quantitatively a sub-class with the whole superordinate class to which it belongs'. Piaget holds that 75 per cent of 7 or 8 year olds have this ability. The experiment was designed to test this contention using rigorous controls across groups for sex, age, educational level and socio-economic background. The experiment had two main aims - firstly to investigate the relationship of question ambiguity to the solution of Class Inclusion problems, secondly to test the effect of counting training and discussion training on Class Inclusion solutions. The experiment utilised a pre-test, training, post test design. The subjects were twenty-eight 5 and 6 year old children from a single state primary school population. The findings suggested that type of question may be a factor determining success in solving the Class Inclusion problems, although significance was not reached. Subjects who were given counting training did significantly better on the post-test than the subjects who received simple stimulus exposure and those in the control group. However, subjects given discussion did not do significantly better than stimulus exposure or control subjects on the post-test although there was some indication that it was effective. It was suggested that further experimentation on a larger scale might be valuable since such findings have implications both for Piagetian theory and the educational field.

73. THE EFFECTS ON MORAL JUDGEMENT  
OF SOCIAL PRESSURE FROM ADULTS  
AND PEERS AMONG VOLUNTARY AND  
COUNTY SCHOOL CHILDREN IN  
NORTHERN IRELAND

Knox, E.M. (1971)

192 12-year-old boys and girls from county and voluntary non-selective secondary schools completed the Moral Dilemmas Test and the J.E.P.I. Previous research had indicated that Russian children brought up in a more authoritarian type environment were more adult orientated, or more mature in their responses to the Moral Dilemmas Test, than their American counterparts. English children have been found to be slightly more adult orientated than their American age mates. In this study Irish children performed at a level more closely comparable to the Russian children than either their English or American counterparts. Pupils in county schools were found to be more mature than those in voluntary schools, while girls were more mature than boys.

74. A COMPARISON OF CATEGORY CLUSTERING  
AND SUBJECTIVE ORGANISATION IN THE  
FREE RECALL OF WORD LISTS BY  
DIVERGERS AND NON-DIVERGERS

Leavy, M. (1972)

Two groups of subjects, classed as divergers and non-divergers on the basis of their fluency and flexibility scores on two open-ended tests, were presented with a categorised and a non-categorised list of 16 items and asked to recall as many words as possible from each list on a number of trials. The results failed to show any significant difference in the organisation of recall by the two groups of subjects, but there was some indication that divergers tended to have slightly higher initial scores on clustering and to develop subjective organisation across trials, while non-divergers appeared to take longer to recognise and use the categories, and did not increase their subjective organisation scores with practice. A

wide range of individual differences was found in both measures of organisation.

75. AN INVESTIGATION INTO THE  
NATURE OF PERSISTENCE

Lowe, P.E. (1971)

186 secondary school pupils with a mean age of 13 years were rated by their form teachers on the Pupils' Persistence Rating Sheet (P.P.R.S.). 2 extreme groups, each consisting of 20 subjects, were chosen according to their rating. These subjects completed the Otis Mental Ability Test, the High School Personality Questionnaire and two puzzles making up the individual Feather Persistence test.

The results of the analysis suggested that persistence is a relative variable depending upon the circumstances holding at the time of measurement, the test involved, the motivation of the subject and the reward value of success.

76. TO INVESTIGATE THE RELATIONSHIP  
BETWEEN LANGUAGE DEVELOPMENT,  
SOCIAL CLASS AND INTELLIGENCE

Martin, I. (1971)

The subjects were two groups of 26 seven-year-olds, the groups differing on parental socioeconomic level and type of school attended. They each completed a Raven's Progressive Matrices, the Vocabulary list taken from the W.I.S.C., and a grammar test consisting of sentences containing nonsense syllables which the subjects had to replace with appropriate words. The children supplied information on their interests and home environment during an informal interview.

There were no significant differences between the 2 groups on the test of intelligence and grammar, but the middle-class children

had considerably higher vocabulary scores. For both groups intelligence was shown to be an important factor in determining the level of language ability.

77. A COMPARATIVE STUDY OF THE EDUCATIONAL ATTITUDES OF FULL-TIME AND PART-TIME STUDENTS IN THEIR FIRST YEAR AT UNIVERSITY  
McAlpine, R. (1971)

Two groups of subjects were tested. Group I were 25 first year full-time students who had entered the university straight from school. Group II were 12 part-time students, the majority of whom were over 25 and had full-time employment. They completed three tests, an Occupational Interest Inventory, a survey of study habits and attitudes and an attitude scale designed to measure students' attitudes towards university. They were also asked direct questions on their reasons for going to University, qualifications and future ambitions. The results showed that the study habits of the mature group were superior to the full-time group and the mature group's attitude to their vocation was better formed. The mature group studied part-time, so there was no way of knowing whether more efficient use of the time available for study was due to the part-time nature of the course or their maturity. However, they were making good use of the educational facilities provided and the author suggests that there appears to be no reason why more universities should not provide similar part-time courses.



78. TO INVESTIGATE THE RELATIONSHIP  
BETWEEN DIVERGENT THINKING, FIELD-  
DEPENDENCE SOCIABILITY AND PARENTAL  
AUTHORITY ON 11-YEAR-OLDS

McClurg, M. (1972)

Two divergent thinking tests, one verbal and one visual, were administered to 58 eleven-year-old children in a Belfast grammar school. The children were also given a questionnaire designed to determine their popularity among their peers and a questionnaire to determine whether they saw their parents as democratic or authoritarian. From the scores on the divergent thinking tests 2 groups of 10 high divergers (5 boys and 5 girls) and 10 low divergers were obtained. There was no significant difference between the groups in intelligence or vocabulary. A measure of field independence, the Children's Embedded Figures Test, was administered to these 20 children and a teacher was asked to rate them according to the acceptability of their behaviour in class, their enjoyment of learning, their general ability and their prestige among their peers.

High divergers were found to be significantly more field independent and were rated as displaying more acceptable behaviour and enjoying learning more than low divergers. No significant differences were found between high and low divergers in popularity or in their perception of their parents' authority.

79. THE SUBJECTIVE ORGANISATION  
BY SUBNORMAL CHILDREN IN  
FREE RECALL

McCoy, M.M. (1971)

In two experiments the free recall of mongol and non-mongol retardates was examined. The stimuli were two sets of 6 unrelated items of high frequency usage and one set containing 6 items drawn from three categories. The items were presented pictorially.

The author found the extent of subject organisation depended on aetiological group and list content. Both groups of subnormals cluster the words into categories in free recall. The author considers that the ability structures of mongols differ fundamentally from those of non-mongols to such an extent that 'matching' on the basis of mental age levels may not indicate comparable, global levels of development at all.

80. SHORT-TERM MEMORY PROCESSES  
IN SUBNORMAL CHILDREN AND  
ADULTS, AND IN NORMAL  
CHILDREN

McDonald, G. (1972)

Groups of normal children and young and adult subnormals matched on mental age were asked to recall digit messages after very short unfilled intervals of time and after longer intervals in which there was low and high retroactive interference. Both item and order properties of recall were estimated. Results showed that the retention slopes of the three groups between conditions did not differ significantly. It was concluded that learning impairment occurs primarily at the acquisition stage, not in retention. Although the differences between the groups were not significant, the results suggest that the distinctions made between immature, immature and damaged, and mature but damaged CNS activity may be useful.

81. THE EFFECTS OF VERBAL INSTRUCTION  
ON THE DISCRIMINATION REVERSAL PER-  
FORMANCE OF NORMAL AND RETARDED  
CHILDREN OF LIKE MENTAL AGE

McKeown, K. (1971)

16 retarded and 16 normal children were matched for M.A. scores. The groups were subdivided. Half the subjects received verbal instruction and a standard discrimination reversal task, the other did not. In both verbal and non-verbal groups retardates took more

trials to reach the reversal criterion than normal children. Verbal instruction greatly facilitated the retardate's performance except for mongols for whom instructions inhibited reversal performance. The author suggests that the facilitation occurs indirectly. A relevant perceptual response evoked by verbal labelling would explain the lack of interference from inappropriate verbal labelling during reversal.

82. SOCIOMETRIC STATUS AND INDIVIDUAL  
ADJUSTMENT IN THE CLASSROOM

McKeown, L. (1971)

The sample population consisted of 83 pupils from P6 classes in 3 schools selected to provide 3 groups varying in social class. The children in each class completed a restricted choice sociometric test in which they named in order the three classmates who they would most like to sit beside. The results for each class were used to construct sociograms of the target type to illustrate the social structure of each class. Group cohesion indices were calculated for each class. The Bristol Social Adjustment Guides were used to measure each child's social adjustment to the classroom situation. The results suggest a positive relationship between high sociometric status and good social adjustment in each of the three groups under study, but there were differences in the form of this relationship in the three schools which the author attributed to differences in socio-economic background.

83. AN INVESTIGATION OF THE ROLE OF VISUAL AND VERBAL CUES IN THE RETENTION OF PRIMARY SCHOOL CHILDREN

McMaster, R.J. (1971)

Two experiments were performed. The stimuli in each were 12 easily named small objects and 12 geometrical shapes of similar size. These sets were further divided into 4 objects in each of 3 different colours. The task involved simple manipulation of objects according to verbal instructions, visual instructions or verbal plus visual instructions. The first experiment had nine subjects in each of 5 age groups (5, 6, 7, 8, 9 years). The second experiment had 30 subjects in each of 2 age groups (5, 9 years).

The first experiment confirmed there were differences in the amount of retention when using auditory or visual presentation. There was an apparent trend suggesting that auditory cues produce better retention than visual cues with older subjects, while in young subjects memory tended to be purely visual.

The second experiment, using more subjects, did not confirm the hypothesis. The writer proposes two reasons why negative results were obtained. Firstly, it had not been possible to keep the conditions distinct. Many subjects spontaneously named the stimuli, thus converting visual input into verbal modality for storage. Secondly, the effects of schooling were apparent even with 5-year-olds.

84. AN EXPLORATORY STUDY OF SOCIAL ADJUSTMENT IN PARTIALLY SIGHTED CHILDREN

Moorehead, A. (1971)

20 partially sighted subjects were selected from a special school in Northern Ireland and 20 normally seeing subjects were matched with them on age and scores on the W.I.S.C. Social adjustment was measured by three tests, a paper and pencil test of popularity, teachers' ratings of popularity and the Kuethe felt test

of social distance. In the latter test children replaced displays of felt figures on a board. In the well adjusted it has been found that human figures are replaced closer together than are neutral objects since most people have a tendency to think of people belonging together. The Snellen test of visual acuity was used to rate the partially sighted on severity of visual defect.

The analyses of results showed no significant differences in the social adjustment of partially sighted and seeing subjects as measured by the Kuethe Felt Test. No relationships were found between social adjustment and either intelligence or degree of handicap in the group as a whole. Popularity was positively related to intelligence for the sighted subjects and visual acuity for the younger partially sighted group.

85. AN INVESTIGATION INTO THE  
COMPARATIVE ABILITIES OF YOUNG  
DEAF AND HEARING CHILDREN IN  
THE ATTAINMENT AND GENERALIZATION  
OF THE 'INTERMEDIATE' CONCEPT

Moorehead, H. (1971)

The subjects were 3 groups of deaf children, aged 11, 9 and 7, and two groups of hearing children, aged 9 and 11 years. Each group was composed of 10 subjects. The groups were matched for scores on Raven's Progressive Matrices, age, sex and socio-economic background. Each subject was given a concept attainment task in which he was required to choose from three boxes the middle-sized one. The absolute size of the boxes was varied on each trial. Those subjects who succeeded in attaining the concept of 'middle' were given 2 trials on each of the transfer tasks of 'size' (using cards instead of boxes), 'brightness', and 'density'.

The deaf were found to be about 2 years behind the hearing in the ability to attain the intermediate-size concept. Those deaf children who attained this concept were able to use it as well as the hearing in the transfer task involving cards of varying size but there was 2 years retardation on the part of the deaf in the transfer tasks of 'brightness' and 'density'. The qualitative results indicated that a lack of verbal mediation was responsible for the poor performance of the deaf. They did not have the word 'middle' or a linguistic equivalent in their vocabulary.

86. THE RELATIONSHIP BETWEEN THE  
VOLENCE OF SECTARIAN RIOTS  
AND THE CONCOMITANT CHAOS AND  
YOUNG CHILDREN'S AGGRESSIVE  
RESPONSES

O'Kane, M. (1971)

A group of 25 7-year-old children was selected from a school in the lower Falls area of Belfast. A control group of equal number and age was selected from an area of Belfast in which there was a similar socio-economic and cultural environment but which had not been involved in riots.

The Rosenweig P.F. study was administered individually to each child as well as a series of photographs which could be construed as violent, but not necessarily so.

In general, the experimental group did tend to react more aggressively than their peers and to interpret more pictures as portraying violence. There was a difference in the Direction of Aggression between the 2 groups, with the experimental group tending to act in an extra-punitive manner.

87. AN INVESTIGATION INTO THE STEREOTYPES AND PREJUDICES OF PROTESTANT AND CATHOLIC BOYS WITH AND WITHOUT A PERIOD OF INTER-RELIGIOUS CONTACT

O'Neill, E. (1971)

The subjects were 40 Protestant and 40 Catholic boys (aged 14-16) from riot areas of Belfast. 20 boys from each group had attended a Joint-Church Adventure Camp, intended to reduce religious prejudice, six months before the investigation. All subjects were given an adjective check-list and asked to choose from this five adjectives to describe each of four ethnic groups, Protestants, Catholics, Negroes and Jews. They also rated these groups on a modified Bogardus Social Distance Scale. All subjects completed the Raven's Progressive Matrices test.

The stereotypes given showed that Protestant and Catholic subjects described their religious outgroup unfavourably. The Protestant subjects gave more rigid stereotypes. The social distance scores reveal that the Protestant subjects showed more prejudice to all other groups than the Catholic subjects did. There was no significant difference in the social distance score of boys who had attended the Joint-Church Adventure camp and those who had not. The author comments that the camp did not provide enough opportunities for actual acquaintance and that there was no co-operative pursuit of common objectives. Suggestions are made for the more effective use of the camp situation in relation to research on attitude change.

88. BIRTH ORDER DIFFERENCES IN NON-VERBAL INTELLIGENCE AND LINGUISTIC PROFICIENCY

Sacret, J.M. (1971)

In order to control for the variable of family size, all the subjects in this study were selected from families with 6 children. 41 twelve-year-old boys constituted the final sample. In order to compare non-verbal intelligence scores the subjects were divided into

6 groups according to birth position. They were also divided into two groups, earlier and later born, for the purposes of comparing their scores on seven different criteria of linguistic ability obtained from an analysis of an essay produced by each child.

An analysis of variance showed no significant difference between the six birth-order categories in their non-verbal scores, although the first born scored rather more highly than the later born, amongst whom there was no consistent pattern. This result is in agreement with the most thorough investigations in this field and suggested to the author that the criticisms levelled at the majority of studies that had claimed to show a decrease in intelligence with birth order were justified.

The comparison of the linguistic skills of the earlier and later born failed to provide any support for the hypothesis that the earlier born should be superior.

89. AN INVESTIGATION INTO THE  
ROLE OF CEREBRAL DOMINANCE  
IN READING DISABILITY

Sawyer, M.H.W. (1971)

Two groups of male subjects aged 11 years, differing in reading ability, were matched for intelligence, handedness, socio-economic class and schooling. The control group was of average reading ability. The experimental group read more than 18 months behind their chronological age. 16 pre-recorded lists of words were presented to each subject monaurally, via earphones, to each ear in turn. In each list the subject responded to one of the stimulus words by pressing a button which stopped a timing device. The mean reaction time for both groups was shorter for the right ear than for the left. However, within the 2 groups the patterning of response was different. For the normal readers reaction time was significantly shorter for the right ear than for the left. For the retarded readers there was no significant difference in



reaction time between the left and right ears. The normal readers performed significantly worse on the left ear than the poor readers. The results were interpreted as an indication that, whereas speech representation had ceased in the right hemisphere for normal readers, equal representation was still evident in poor readers.

90. A COMPARISON OF TWO PRELIMINARIES TO MEANINGFUL VERBAL LEARNING

Tarran, J. (1971)

A passage about the metallurgical properties of plain carbon steel was presented to three groups of 17-year-old grammar school pupils. Each group contained equal numbers of male and female Arts and Science students. After reading the passage, they completed a 16 item multiple choice test to assess the amount of their learning. The three groups differed in the experience immediately before reading the passage. The first group read a passage containing background material of a higher level of generality, abstraction and inclusiveness (an advance organiser). The second group were given a pre-questionnaire about metals and alloys. The control group was asked to sit and wait while the other groups completed their tasks. Analysis of variance showed that the first group performed better than either of the other groups on the post-test. There was no significant difference between groups two and three, and between Arts and Science students.

It was concluded that with this type of material and sample, the use of advance organisers would be more effective in facilitating learning and retention than an attempt to arouse curiosity in the general subject matter by the use of a prequestioning technique.

91. AN INVESTIGATION INTO THE  
RELATIONSHIP BETWEEN POP-  
ULARITY WITH PEERS AND  
CONFORMITY TO STAFF VALUES  
AMONG GIRLS IN AN APPROVED  
SCHOOL

Twinem, D. (1972)

The subjects of this study were 20 inmates in a girls' approved school. Popularity was assessed using Moreno's (1934) sociometric technique; conduct from weekly ratings by the staff; and attitude from a modified N.I.C.E.R. secondary school survey questionnaire. Attitude toward the school was correlated with behaviour in the school, but popularity was related to neither attitude nor conduct. The author concludes that inmates accept some staff norms for their conduct.

92. DEVELOPMENT OF SPELLING TO  
SOUND CORRELATION. A STUDY  
OF CHILDREN LEARNING TO READ

Wilson, J. (1972)

It has been suggested that the reading task is essentially that of discovering higher order invariants of spelling to sound correlation, and this experiment was designed to investigate the development of these rules in the young child learning to read. It was hypothesised that a child will read accurately words occurring frequently in his reading material and that once he has acquired some idea of these rules they will transfer to unfamiliar material. He will therefore read pseudo words with high spelling to sound correlation better than pseudo words with low spelling to sound correlation.

Three groups of children corresponding to the first three school forms were tested on three types of material, common words they were likely to have encountered in their school reading, pseudo words with high spelling to sound correlation, and pseudo words with low spelling to sound correlation.

There was found to be no significant difference in the P.1 group's performance on the three types of material. With the P.2 and P.3 groups the pseudo words with high spelling to sound correlation were read significantly better than those with low spelling to sound correlation.

It was concluded that very early in the process of learning to read the child begins to perceive regularities of correspondence between the printed and spoken patterns and transfer them to the reading of unfamiliar material.

93. PROBABILITY LEARNING IN  
YOUNG DEAF CHILDREN

Wright, E.D.F. (1971)

20 deaf and 20 hearing subjects were matched for age, sex, general ability and socio-economic status. A non-contingent, sequential two-choice probability learning task was administered individually. The experimental material comprised 100 cards bearing line drawings of large and small rabbits in the ratio of 70 : 30. Each subject was required to predict the next card to be presented by the experimenter. Analysis of variance did not reveal any differences attributable to the variables of age, sex or handicap. A "fine-grain" analysis revealed that the strategies employed by the deaf children bore a striking similarity to those of the hearing. There was no evidence of rigidity or stereotyping of response.

INSTITUTE OF EDUCATION

Dissertations presented in partial fulfilment of the requirements for the Diploma in Curriculum Studies.

94. THE YOUNG SCHOOL LEAVER

Alexander, C.J. (1972)

A discussion and a survey of the attitudes of, and influences on, the young school leaver.

95. CURRICULAR IMPLICATIONS OF RAISING THE SCHOOL LEAVING AGE ESPECIALLY FOR THE AVERAGE AND BELOW AVERAGE PUPIL

Blundell, J.T. (1972)

A theoretical general discussion of the secondary school curriculum and a detailed analysis of suggested curricular changes.

96. GEOGRAPHY IN THE MODERN SECONDARY SCHOOL

Drennan, G.A.R. (1972)

A discussion of the nature of geographical enquiry, the objectives of geography teachers, geography and integrated study and the nature of school examinations in geography.

97. THE PLACE OF HISTORY IN THE CURRICULUM

Fitzpatrick, R.J. (1972)

An outline of objectives, syllabus techniques and methods in history.

98. THE PLACE OF GEOGRAPHY IN THE GRAMMAR SCHOOL CURRICULUM

Gillespie, H.W. (1972)

An outline of objectives, syllabus techniques and method.

99. THE CONCEPT OF THE JUNIOR HIGH SCHOOL IN A TWO-TIER COMPREHENSIVE SYSTEM. THE DICKSON PLAN IN COUNTY ARMAGH

McStravick, B. (1972)

A detailed study of the development, organisation, administration and curriculum of the junior high school, with an examination of the part played by the senior high school and the proposed intermediate high school. The author found that overt selection at 11+ had been replaced by hidden selection in the junior high schools which has led to a bi-partite structure within each school and suggests means to enable these schools to develop a comprehensive identity of their own.

100. AN INDIVIDUALISED PATTERN OF READING INSTRUCTION

Molloy, M.R. (1972)

An examination of the structure of reading skills and a detailed discussion of a reading programme.

INSTITUTE OF EDUCATION

Dissertations presented in partial fulfilment of the requirements for the Diploma in Primary Education.

101. HOME INFLUENCE ON THE ABOVE AVERAGE READER

Adams, L.R. (1972)

A discussion of the relationship between home influences and the skills and abilities of the above-average reader. These influences are examined in case studies of twelve school children in lower and upper primary school classes.

102. PLANNED TEACHING PROGRAMME ASSOCIATED WITH PIAGETIAN TESTS

Davison, W.J. (1972)

A teaching programme for geometry devised in relation to the formation of relevant concepts in the primary school child. Forms of geometry other than Euclidean are discussed.

103. A CASE STUDY OF READING FAILURE

Devlin, B. (1972)

A detailed case study of a girl between the ages of 7 and 9. A remedial programme is suggested.

104. THE PRIMARY SCHOOL CURRICULUM: CRITERIA  
FOR CHOICE OF CONTENT AND ORGANISATION

Frame, R. (1972)

The nature of knowledge is discussed, and an interdisciplinary project on boats and the sea, designed for boys and girls aged ten to eleven, is described in detail.

105. THE INFLUENCE OF PERCEPTUAL TRAINING ON  
LEARNING TO READ

Gabriel, H.C. (1972)

A training programme related to the perceptual basis of the reading process is described, followed by case studies of three non-readers aged over eight years.

106. A SURVEY OF THE APPROACHES TO READING IN  
THE INFANT SCHOOL

Gray, M. (1972)

A critical examination of the methods of teaching reading, (whole word, phonic and linguistic approaches) with a discussion of the available reading schemes, their background and related material. Similar examinations are made of medium modification and cueing techniques, e.g. i.t.a., reading by colour, colour story readers.

107. LINES OF DEVELOPMENT FOR NUMBER IN THE  
ENVIRONMENT

McConnell, J.G. (1972)

A discussion on concept development with particular reference to the acquisition of mathematical concepts. A line of development for length is described.

108. SENSORY STIMULI AND CREATIVE WRITING:  
AN APPRAISAL

McCutcheon, T.M. (1972)

A discussion, with examples, of various forms of primary school writing.

109. CULTURAL DEPRIVATION AND COMPENSATORY  
EDUCATION

Taylor, C.M. (1972)

A review of relevant literature and an historical and sociological description of a school in an inner-city slum with case studies.



INSTITUTE OF EDUCATION

Dissertations presented in partial fulfilment of the requirements for the Diploma in Special Education.

110. A STUDY OF EDUCATIONAL AND ANCILLIARY SERVICES FOR EDUCATIONALLY SUBNORMAL PUPILS IN NORTHERN IRELAND

Agnew, T. (1972)

A survey of facilities available within the six counties of Northern Ireland, including special schools and classes as well as the nature of the peripatetic teacher service and the School Psychological Service.

111. TEN YEARS OF SPECIAL EDUCATION IN A GIRLS' PRIMARY SCHOOL WITH SPECIAL REFERENCE TO COMPENSATORY EDUCATION

Bergin, M.E. (1972)

An examination of the neighbourhood and some of the pupils in an inner-city primary school.

112. SCHOOL COUNSELLING

Campbell, P.J. (1972)

A discussion of the role of the counsellor and the counsellor service with case studies.

113. LANGUAGE THEORY AND AN E.S.N. CHILD  
Fagan, F. (1972)

An examination of the usefulness of language theory to the teaching of language skills, and an analysis of the language of an E.S.N. boy aged eight.

114. A POST-SCHOOL FOLLOW UP STUDY OF EDUCATIONALLY  
SUBNORMAL BOYS  
Gamble, E.S. (1972)

An examination of patterns of employment success of E.S.N. boys from a special school, and an attempt to find ways to help the transition from school to employment.

115. GUIDELINES FOR A READING PROGRAMME FOR  
SLOW-LEARNERS  
Gray, M.H. (1972)

An examination of reading readiness, and a discussion of a graded programme of pre-reading activity as well as the teaching and assessment of reading skills.

116. A COUNSELLING APPROACH TO DELINQUENCY  
Keyes, M. (1972)

A description and discussion of the initiation of a counselling service in a training school.

117. SOME SOCIO-CULTURAL AND EDUCATIONAL  
FACTORS IN AN EXPERIMENT IN EDUCATION

Loughran, G.J. (1972)

A description of the considerations, philosophy and rationale of the reorganisation of an urban boys' secondary school involving the creation of a kind of unstreamed 'middle school', so structured in terms of physical organisation as to provide an effective 'buffer' between the junior school and higher levels of secondary education.

118. THE PERIPATETIC REMEDIAL TEACHER  
SERVICE

Magill, D.E. (1972)

A discussion of the role and function of the peripatetic remedial teacher.

119. CHOSEN FOR SLOW LEARNERS: AN APPROACH TO  
READING

Marks, E.M. (1972)

A discussion of the teacher's role in relation to the slow learner and an analysis of a reading scheme.

120. PLANNING A READING PROGRAMME FOR  
PRIMARY SCHOOLS

McCavera, P.J. (1972)

The programme centres around the areas of reading readiness, word perception and comprehension.

121. A CONSIDERATION OF REPORTS AND RESEARCH  
INTO READING FAILURE

McIlroy, E.A. (1972)

A discussion of research into reading and the nature of the relationship between reading failure and environment, particularly in the formative years of early childhood.

122. THE NEW SCHOOL LEAVER

McMillan, E. (1972)

A discussion on the needs of the young school leaver and proposals for school leavers' courses.

123. MATHEMATICAL CONCEPTS AND THE SLOW  
LEARNERS

O'Callaghan, M.F. (1972)

A discussion of the new approach to mathematics and its application to a group of slow learners aged 7-11.

124. BACKWARDNESS IN A RURAL PRIMARY SCHOOL

Rankin, R.T. (1972)

An examination of the problems of backwardness in a remote rural primary school; with case studies of five pupils.

125. WHEELCHAIR WORLD

Thompson R. (1972)

A two-way look at some provisions made for the education and treatment of physically handicapped children in Northern Ireland between 1940 and 1972.

ST. JOSEPH'S COLLEGE OF EDUCATION

A selected list of dissertations presented in partial fulfilment of the requirements for the degree of Bachelor of Education, 1971.

126. Campbell, D.H.  
Museums in Education.
127. Carlin, J.  
Guidance and Counselling - its  
operation in two Secondary Schools.
128. Connors, B.P.  
Cerebral Palsied Children.
129. Cook, D.  
The Counsellor in the School.
130. Durkan, P.  
Community Schools.
131. Fahey, B.  
The Nature and Problems of Childhood  
Autism.
132. Hamill, G.  
The Evolution of the Craigavon Scheme  
for Secondary Reorganisation from 1965  
to 1972.
133. Loughran, F.M.  
The Self-Ideal in Education.
134. Mallon, G.I.  
A Reading Course for ESN Children.
135. McArdle, E.  
The Deaf Child and Language.

136. McCartan, J.M.  
The Education Provision for Slow-learning in Voluntary Secondary Schools in West Belfast.
137. McGillicuddy, T.B.  
Home and School Relationship in a Small Ulster Town.
138. McKenna, J.  
Guidance and Counselling in Two Northern Ireland Secondary Schools.
139. Mitchell, B.  
The Role of the Teacher.
140. Morgan, P.J.  
The Design of Primary Schools in Northern Ireland.
141. Nolan, D.H.  
An Insight Into the Social Aspects of Juvenile Delinquency.
142. Sloan, J.J.  
Free Will.

ST. MARY'S COLLEGE OF EDUCATION

A selected list of dissertations presented in partial fulfilment of the requirements for the degree of Bachelor of Education.

143. Bailie, M.J. (1971)  
A study of mongolism.
144. Barlow, E. (1972)  
Thalidomide - 10 years later.
145. Bonner, A.E. (1971)  
The application of educational technology to the teaching of children with visual and auditory handicaps.
146. Boyle, K.M.C. (1972)  
The content and objectives of an initial course in teacher education.
147. Boyle, S. (1972)  
An examination and evaluation of some of the provisions made in Northern Ireland for extra-curricular activities.
148. Brady, D. (1972)  
Alienation.
149. Brassil, R.T. (1971)  
The language development of the slow learner.
150. Cambridge, A.M. (1972)  
Introducing thermometry to 8-year-olds.
151. Chester, U. (1971)  
An enquiry into the problem of backwardness with special reference to these children.

152. Collins, A.M. (1972)  
The study of play with reference to therapeutic aspects.
153. Cosgrove, C. (1972)  
Increasing co-operation between parents and teachers.
154. Cosgrove, M. (1972)  
The relationship between moral values and the organisation of the school.
155. Delaney, K.T. (1972)  
An examination of the various approaches to the problem of dyslexia.
156. Devlin, M. (1972)  
Modern approaches to the teaching of religion.
157. Doherty, A. (1972)  
A study of language and some of the implications for religious education.
158. Doherty, B. (1971)  
Emotional behaviour and its development.
159. Eastwood, R.B.M. (1972)  
The mongol child and his family.
160. Fee, K.M.M. (1972)  
Thoughts on parent-teacher co-operation with special reference to parent-teacher associations.
161. Gilleece, A. (1972)  
The effect of stimulation in the pre-natal period of child development.
162. Gilroy, P. (1972)  
The transition from school to work.
163. Graham, A. (1971)  
Teaching by correspondence.



104. Grant, K. (1972)  
A consideration of sexual identities and roles in the British Isles with specific reference to the manner in which males and females are socialised.
105. Hall, A.P. (1972)  
The preparation of a unit of instruction in mathematics.
106. Hanna, D. (1971)  
Autistic children and their parents.
107. Harper, A. (1971)  
The gifted child.
108. Haughian, M. (1972)  
The role of secondary schools in the cultural direction of leisure in education.
109. Henderson, M. (1972)  
The design of a teaching-learning unit of instruction.
170. Hickland, G. (1972)  
Specific developmental dyslexia.
171. Kane, C.M. (1971)  
Educational technology in Europe.
172. Magee, T. (1972)  
Television - the producer, the teacher and the child.
173. McAllister, A. (1972)  
The motivation for and development towards the implementation of comprehensive education in Britain with special reference to the situation in Northern Ireland.
174. McKillop, M. (1972)  
A general survey of careers guidance and counselling in schools.
175. McMonagle, I.N. (1972)  
The home and the school.

176. McSparron, E. (1972).  
Reading difficulties and corrective instruction.
177. McWilliam, S. (1972).  
Maternal deprivation and its effect on the development of children.
178. Mullen, K. (1972)  
A comparative study of a juvenile boy and girl in conflict.
179. Navin, M. (1972)  
Early childhood autism.
180. Quail, D.M. (1972)  
The education of the coloured immigrant child.
181. Quinn, M. (1971)  
Television teaching with special reference to the teaching of English in the United Kingdom.
182. Stevenson, K. (1972)  
The educational of hospitalised children.
183. Stewart, M. (1972)  
The nature and influence of delinquent boys' relationships.
184. Wilson, M. (1972)  
Provisions for the physically disabled in Northern Ireland.

STRANMILLIS COLLEGE OF EDUCATION

A selected list of dissertations presented in partial fulfilment of the requirements for the degree of Bachelor of Education, 1972.

185. Beattie, A.  
The problem of dyslexia.
186. Briggs, E.C.  
An appraisal of the Integrated Day. An examination of the historical background and the curriculum in two primary schools.
187. Caldwell, P.  
Anxiety in Adolescence.
188. Craig, H.E.  
An exploration of the difficulties involved in the diagnosis and subsequent treatment of children displaying symptoms of infantile autism.
189. Doak, J.C.  
Some aspects of existentialism in secondary education.
190. Fitzgerald, R.J.  
Who is to teach morality? A discussion of the place of moral education and some moral education programmes.
191. Given, K.  
A consideration of certain specific home conditions associated with delinquency.
192. Kennedy, F.C.C.  
A study of the psychological and educational characteristics and needs of brain-injured children.

193. Logan, J.A.

The role of programmed instruction in remedial education. A programme is presented for children aged 9-10 years.

194. McCrea, S.A.

An application of programming techniques in the teaching of basic trigonometry. The application and evaluation of an homographic programme in a secondary school.

195. Moore, J.B.

Some arguments for the formation of 'oracy' as a basic educational objective with special reference to primary education.

196. Reddy, M.M.

Education and the concept of human development: a discussion of different models of teacher-pupil relationships.

DEPARTMENT OF THEOLOGY

Summary of a thesis presented in fulfilment of the requirements for the degree of Doctor of Philosophy.

197. RELIGIOUS UNDERSTANDING AND  
RELIGIOUS ATTITUDES IN MALE  
URBAN ADOLESCENTS

Turner, E.B. (1970)

A review of some studies and theories of concept formation and of attitudes precedes a consideration of literature concerning religious understanding and religious attitudes among children and adolescents.

The construction of two measures is described, involving the testing, individually and in small groups, of almost four hundred secondary schoolboys aged from eleven to seventeen. The measures were: (1) an individual Religious Vocabulary Test of forty Biblical words selected by Tucker's scaling method from an original list of one hundred and thirty; (2) a Religious Attitude Scale of twenty-five statements selected by item analysis from a pool of seventy-four.

These measures, with the Science Research Associates 'Primary Mental Abilities', were administered to over seven hundred boys aged from eleven to fifteen, in county secondary and voluntary secondary schools in Belfast.

Analysis of scores on the Religious Vocabulary Test revealed significant increases and those on the Religious Attitude Scale showed significant decreases related to age. On both tests, the scores of the voluntary school subjects were consistently and significantly higher. Differences with age were more apparent among county school pupils. Relationships between scores on the test instruments also differed between schools. Religious understanding appeared to be more

closely related to intelligence for county school pupils and to religious attitudes for voluntary school pupils.

PART TWO

PUBLISHED EDUCATIONAL PAPERS  
AND BOOKS

Selected summaries of research articles and books published by authors resident in Northern Ireland.

195. Brown, G.A. (New University of Ulster)

The performance of non-graduate student teachers in university courses.

British Journal of Educational Psychology, 1971, 41(3), 314-316.

The study compares the first year examination results of a 1969 certificate intake for teacher-training and the three year honours degree intake. Certificate students are full members of the university, use the same academic and social facilities, take the same range and number of course units and are assessed in the same way as degree candidates. They tend to have lower A-level qualifications. The first year examination results of the degree and the certificate students were analysed using chi-squared tests. Certificate students had few failures and fewer high scoring candidates. Certificate candidates who did well tended to be better qualified on entry but not to differ significantly in intelligence. Taken together, results show that although there were significant differences overall, there were large overlaps between certificate and degree results.

199. Caldwell, J.C. and Seth G. (Queen's University)

Personality and Attainment.

N.I.C.E.R. Publication No. 8,  
1972, 56pp.

Five Schonell tests of English and two of arithmetic were administered to 1284 ten-year-olds in a representative sample of Northern Ireland schools. Groups of maladjusted and well-adjusted pupils were identified using the Bristol guide. The maladjusted



pupils were inferior to the well-adjusted control group on all attainment tests, but significantly so only on Reading and English Usage. Aggressive children scored low on all tests. Extraversion-introversion was significantly associated with Reading, English Usage and Vocabulary.

Analysis of home conditions revealed that where the mother is 'disinterested', both school performance and adjustment are poor. Attainment was higher in 2-3 child families, and fell steadily as family size increased. Maladjustment was found to be higher in families of six or more, but single children were the most maladjusted group.

200. Cave, E.D. (Lisnasharragh Secondary School)

The effects of 11+ results on the subsequent careers of pupils.  
British Journal of Educational Psychology, 1967, 37(1), pp 41-46.

The circumstances and prospects of candidates in the I.Q. range 113-116 in Belfast and Down were investigated 8 years after the selection examination at 11+. A comparison was made between those selected for academic grammar school education and the unqualified group in four social classes. It was found that the influence of social class was such that, especially at the extremes of the social class range, 'qualifying' or 'not qualifying' had little significant effect. In the middle of the social class range the 'qualified' pupils tended to stay longer at school, to have higher scholastic attainments and to reach a higher occupational level.

201. Dell, G.A. (Belfast Education Authority)

Social factors and school influence  
in juvenile delinquency: an analysis  
of police cases in the Belfast Juvenile  
Court, July, 1961 to June, 1962.  
British Journal of Educational Psychology,  
1963, 33(3), pp 312-322.

An analysis of some of the educational and social factors associated with 492 police cases appearing in the Belfast Juvenile Court over 12 months showed the heaviest incidence of delinquency among children of secondary age in non-selective schools. Differences in incidence rates between Roman Catholic and Protestant children were strongly associated with differences in socio-economic status. Other factors appearing to facilitate delinquency were a low level of socio-economic status, retardation in attainments, and possibly also particular age groups. Independently of the general socio-economic level, the location of the school in one of the old, central and socially declining areas of the city was associated with a high delinquency rate. The quality of a school's morale was effective in a small, but measurable degree in counteracting tendencies of delinquency. Ways of increasing the strength of this influence were briefly discussed.

202. Dewart, M.M. (Queen's University)

Social class and children's  
understanding of deep structure  
in sentences.  
British Journal of Educational  
Psychology, 1972, 42(2), pp 198-203.

An attempt was made to test children's ability to comprehend passive voice sentences and related sentence structures in which deep and surface structure differ considerably. 44 children (aged from 5.3 to 6.6) from 2 social class groups were asked to manipulate objects to correspond to sentences spoken by the experimenter. Middle-class children made fewer errors than working-class children. The findings

suggest that there may be social class differences in the rate at which children acquire a mastery of the syntactic rule system of the language.

203. Fraser, R.M. (Belfast City Hospital)

Disorder and defenses: a study of psychiatric symptoms in some Belfast children exposed to street-rioting - and Ulster's Children of Conflict. New Society, April 15, 1971.

A selection of case studies and a discussion of the implications of these and similar cases.

204. Goldstrom, J.M. (Queen's University)

The Social Content of Education 1808-1870. A study of the working Class School Reader in England and Ireland. Irish University Press: Shannon, Ireland, 1972.

This survey on the type of school reader used in schools in England and Ireland between 1808 and 1870 shows that the readers did not evolve gradually but changed abruptly in response to social and economic pressures. These pressures brought about three distinct phases in education which the author describes as the Religious, the Secular and the Economy phase, each of which saw the emergence of a well-defined 'Reader'.

205. Greer, J.E. (New University of Ulster).

Religious Belief and Church Attendance  
of sixth form pupils and their parents.  
Irish Journal of Education, 1971, 5, 2,  
pp 98-106.

The results of an investigation into the religious beliefs and practices of Northern Ireland sixth-form pupils and their parents suggest that in general the degree of certainty of belief in God and the frequency of church attendance of parents and children are related. However, in several cases, a marked difference was observed between the degree of certainty of belief in God of parents and of their children, and a small but significant difference was found between the frequency of church attendance of parents and boys. About half of the pupils who were uncertain of God's existence and about a quarter of the pupils who were fairly sure that God did not exist attended church regularly.

206. Greer, J.E. (New University of Ulster)

The Child's Understanding of Creation.  
Educational Review, 1972, 24(2), pp 99-110.

An investigation of the way in which some primary and grammar school children understood the meaning of the Genesis story of creation. 46 children were involved in recorded discussions on this topic. The author illustrates the children's difficulties in understanding Genesis and the meaning of the symbolism as well as relating the theological world view with the scientific world view.

207. Magee, J. (St. Joseph's College of Education)

The teaching of Irish History in  
Irish Schools.  
Community Relations Commission.  
occasional Paper 1.

A survey of Irish History teaching in Catholic and Protestant schools.

208. McAleese, W.R. and Unwin, D. (New University of Ulster)

Microteaching: a selective survey.  
Programmed Learning and Educational  
Technology, 1971, 8, pp 10-21.

The term microteaching is most often applied to the use of closed circuit television to give immediate feedback of a trainee teacher's performance in a simplified environment. The advantages of the method are examined for the supervisor and pupil teacher. Modelling or demonstration teaching is briefly discussed, followed by an appraisal of evaluation instruments and the effectiveness of video tape feedback.

209. Moore, M.E. (Queen's University)

Parent-teacher communication in rural  
areas: a Northern Ireland Survey.  
Irish Journal of Agric. Econ. Rur.  
Sociol., 1972, 3(2), pp 157-175.

Opinions on parent-teacher communication were obtained from mothers of children attending ninety-nine primary schools. The results indicated that informal contacts cannot be assumed to provide adequate opportunities for exchange of information between parents and teachers in rural areas. The patterns of communication which are successful in urban areas are often inappropriate in situations where schools are small and families large. Proposals are made for better use of existing opportunities for parent-teacher communication in rural communities.

210. Moore, M.E: (Queen's University)

Primary teachers' opinions of causes of disagreement between teachers and parents.  
Durham Research Review, 1971, 26,  
pp 515-522.

The author found that school progress provided the most frequent cause for disagreement between teachers and parents followed by 'future education'. The differences between subgroups, divided according to school size, school type, sex of respondent, teaching experience and headship experience, were examined.

211. Rhodes, E. and McCormack, P.J. (New University of Ulster)

Youth in Derry. A Survey Report.  
The New University of Ulster  
Adult Education, Magee University  
College, Londonderry, 1972.

A survey of 258 young people in the age-range 13 to 18 was carried out in 1969. The study inquired into their leisure activities and aspirations.

212. Russell, J.L. (University of Strathclyde)

Civic Education in Northern Ireland.  
Community Relations Commission, 1972.

A questionnaire was administered to 1932 boys (955 Protestants and 977 Catholics) in the first and fourth years of grammar and secondary intermediate schools. An analysis was made of differences in feelings towards government and attitudes to political violence.

213. Sutherland, M.B. (Queen's University)

The Use of Aids in Teaching Comparative Education to Future Teachers.  
Proceedings of the First World Congress of Comparative Education Societies:  
Ottawa, Canada: 1970.

Three aspects of the subject are discussed: (1) advantages to be expected from the use of films, filmstrips, slides, examples of pupils' work, school textbooks and other documents in teaching Comparative Education; (2) use made of these aids by members of the British Section of the Comparative Education Society in Europe; (3) indications for future development.

214. Sutherland, M.B. (Queen's University)

Everyday Imagining and Education.  
Routledge and Kegan Paul: 1971, 224 pp.

Conflicting attitudes towards the value and use of imagining expressed by educationists, psychologists, teachers and others are discussed. Relationships between imagining, images, memory, creativity and other forms of thinking are investigated with reference to relevant research findings; an outline is given of the sequence of imaginative behaviour in normal development. The use of techniques based on imagining in therapy, attitude modification and general education is analysed. Finally the place of imagining in the education of the emotions and educational methods related to this are considered.

215. Trew, K.J. (N.I.C.E.R.)

The physical environment of a representative sample of Northern Ireland primary schools.  
The Northern Teacher, 1971, 10(3), pp 27-31.

An examination of the judged adequacy of the facilities, equipment and physical aspects of 115 primary schools.

216. Wilson, J.A. (N.I.C.E.R.)

Environment and Primary Education in Northern Ireland.  
N.I.C.E.R. Publication No. 7, 1971, 298 pp.

The study investigated the relative contribution of home, neighbourhood and school conditions to the educational progress of some 400 pupils at two age-levels in a representative sample of 115 primary schools. The complexity and magnitude of the environment-educational relationships were examined by means of factor and multiple regression analyses.

217. Wilson, J.A. (N.I.C.E.R.)

Personality and Attainment in the Primary School.  
Research in Education, 1972, 6, pp 12-23.

An investigation of the personality structure of representative samples of ten-year-old boys and girls only nominally substantiated a two-factor hypothesis. Stability was distinguished from Extraversion, but two aspects of the latter were distinguished for girls and a Dominance factor appeared for both sexes.



218. Wilson, J.A. (N.I.C.E.R.)

Personality structure and  
attainment of ten-year-olds.  
Research in Education, 1972,  
7, pp 1-10.

Regression analysis failed to substantiate the hypothesis of non-linear association between attainment and personality for ten-year-old boys or girls. Extraversion for boys and Stable-Extraversion for girls showed highly significant linear associations with superior ability and attainments. It was suggested that the able high-achieving pupil who is extraverted in the primary school classroom, may later, as an able high-achieving student, adapt to a learning situation which is increasingly 'introverted'.

A selected list of research articles and books  
published by authors resident in Northern Ireland

219. Greer, J.E. (New University of Ulster)  
A Questioning Generation.  
A report on sixth form religion  
in Northern Ireland.  
Northern Ireland Committee of  
the Church of Ireland Board of  
Education, 1972, 88 pp.
220. Greer, J.E. (New University of Ulster)  
Sixth Form Religion in Northern  
Ireland.  
Social Studies, Irish Journal of  
Sociology, 1972, 1(3), pp 325-340.
221. Parry, G. and Unwin, D. (New University of Ulster)  
Research concerning New Media  
in Primary Education.  
Childhood Education, 1971, 48,  
pp 43-50.
222. Rogers, P.J. (Queen's University)  
History. Chapter IV  
In: Dixon, K. (Ed.) Philosophy  
of Education and the  
Curriculum.  
Oxford: Pergamon Press, 1972,  
pp 72-134.
223. Unwin, D. (New University of Ulster)  
Simulations and Games: Descriptions  
and Sources.  
In: Tansey, P.J. (Ed.) Educational  
Aspects of Simulation.  
London: McGraw-Hill, 1971.

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