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*Propostas para estudos de crianças nas escolas*

## PROPOSAL FOR STUDIES OF CHILDREN IN SCHOOLS

Robert J. Havighurst

It is proposed to make a series of studies of children in primary schools, with the aim of

1. Laying a foundation for more extensive and definitive studies later on.
2. Getting some information about the conditions of success and failure in primary schools.
3. Training students in research methods.

### Procedure

A small group of 4 or 5 people will plan the research and 2 or 3 people will take responsibility for carrying through specific projects and writing them up for publication.

The planning group will meet perhaps twice a week for the next two months, during which time we will agree on the actual researches to be made, and assign responsibility for them.

Selection of Schools. We do not need to worry about getting a sample of schools, as long as we get a variety of schools. Probably some such collection of schools as the following:

- A public school in a middle-class area
- A public school in a working-class area
- A rural school, or two
- A Catholic private school
- A lay private school

We might study the 8-year-olds and the 10-year-olds in these schools, or a sample of them if the school was so large as to have more than 100 pupils of a given age. The total number of children studied might be approximately 600 to 800.

### Types of Research Studies

The actual research studies should be determined by the working team in accord with their own interests and skills. The following are suggested as possibilities,

A. Studies of Mental Abilities in relation to School Achievement and Social Status

This would be mainly a testing project, and might take the form of administering the following tests:

- A standard group test of intelligence
- The Goodenough Draw-a-Man test
- The Weill non-verbal intelligence test
- Standard Achievement tests in Arithmetic and Reading

The intercorrelations of the tests and the correlation of the test scores with socio-economic status would be calculated. The results would help to evaluate the factor of social status in relation to school achievement, and would give some basis for a judgment as to whether children can usefully be classified on the basis of group tests of intelligence.

B. Studies of Interests of Children

This would be an extension of the research of Donna Lucia Pinheiros.

C. Studies of Personality Development in Children.

Several simple group tests could be given, on which data are already available for other societies. This would permit comparative studies, which would be interesting not only to Brasil, but also to wider audiences.

One such "test" is the essay on the subject--"The Person I would Like To Be Like When I Grow Up." This has been used with a number of American groups in an effort to study the development of the ideal self. It has also been used with a New Zealand group. Comparison of Brazilian children with these other groups would be interesting.

Other similar comparative studies grow out of the researches of Piaget on the moral development of children. Still others can be borrowed from anthropological studies. The writer has used a group of sub-studies to compare American Indian with white children. One was a study of Moral Ideology, and the other a study of Emotional Experience.

D. Studies of Home-School Relations

It would be useful to have interviews with parents of children in various social classes, to get their attitudes toward schooling for their children. It would also be useful to

contrast the home relations of two groups of lower-class children--those who succeed in school and those who do not.

E. Study of Transition to Secondary School

The last grade in the school, fifth or fourth as the case may be, might be studied from the latter part of the last primary school year and the first part of the first gymnasium year, so as to find out who goes to secondary school, and who does not, and why.

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Robert J. Havighurst

Possíveis campos de pesquisa e desenvolvimento pelo Centro, a serem discutidos e avaliados por um grupo de planejamento.

Tem-se em vista a realização de um ou mais projetos de pesquisa e política educacional que se julga serem de importância capital e urgente para o Brasil. Os seguintes projetos são abaixo apresentados para discussão.

A- Processos de promoção dos ~~níveis mais baixos~~ <sup>graus inferiores</sup> de educação para os ~~níveis mais altos~~ <sup>graus superiores</sup>.

1. Critérios de promoção na escola primária.
2. O exame de admissão da escola secundária. Características dos alunos que passam e dos que não passam da escola primária para a secundária.
3. Exames nas escolas secundárias. Como são aplicados esses exames e avaliação dos mesmos por técnicos em currículos.
4. Exames de admissão a instituições superiores. Características dos estudantes que obtêm êxito e dos que fracassam nesses exames.

Esse estudo teria como principal finalidade a melhor interpretação do sistema educacional como meio de seleção de indivíduos para as mais elevadas posições na sociedade. O projeto poderia resultar em propostas para a modificação dos exames, ou dos métodos e critérios de promoção. Poderia também dar origem a propostas de modificações de currículos. As pessoas relacionadas com o projeto seriam de dois tipos: técnicos em estudos de alunos por meio de testes e outros processos e técnicos nos setores básicos de currículos.

B- O ensino da leitura a crianças, adolescentes e adultos.

1. Estudo dos métodos adotados no Brasil para o ensino da leitura nesses três níveis. Críticas e sugestões para melhoramentos possíveis.
2. Levantamento das facilidades existentes para o ensino da leitura. Recomendações para a ampliação de certas facilidades.

As pessoas relacionadas com êste projeto devem ser técnicos em ensino da leitura e possivelmente deverão obter a colaboração de técnicos estrangeiros com experiência dos Programas de Educação Fundamental da Unesco.

C- Testes padronizados de Inteligência e de Rendimento escolar no Brasil.

1. Levantamento dos testes empregados nos vários estudos de medida da inteligência e de rendimento escolar. Críticas desses testes.
2. Uma investigação da necessidade de testes padronizados de inteligência e de rendimento escolar. Que espécies de testes em que níveis educacionais são necessários à educação brasileira.
3. Preparação e padronização dos testes necessários. Por exemplo, poder-se-ia concluir e padronizar um teste coletivo de inteligência adequado às condições brasileiras. Um outro exemplo: comissões de técnicos na matéria, no nível secundário, poderiam produzir testes padronizados de rendimento no setor principal do currículo.

As pessoas relacionadas com êsse estudo deverão ser técnicos em testes, bem como educadores gerais e técnicos em currículo. Talvez fôsse possível convidar, na qualidade de consultor, algum membro quer do Programa de Testes de Iowa, quer do Serviço de Aplicação de Testes Educacionais.

D- Estudos de Relações de Comunidade e Escola

1. Estudo da maneira pela qual a escola primária e a secundária servem a uma variedade de tipos de comunidades, urbanas e rurais. Isto tornaria necessário organizar-se um modelo para estudo de comunidades - o que vem fazendo Dr. Pearse.
2. Estudo das expectativas dos pais em relação às escolas primária e secundária. Isto completaria a pesquisa que atualmente vem sendo feita por D. Aparecida bem como as entrevistas com pais realizadas por Dr. Pierce.
3. Estudo da maneira pela qual a comunidade muda a - através da educação. Isto é aqui afirmado de maneira um tanto abstrata, mas é na realidade fundamen

tal para a política educacional nas áreas rurais e nas pequenas cidades, onde o ritmo da mudança social não é tão rápido como nos centros industriais. Este é um estudo para a qual o prof. Solon Kimball poderia contribuir.

As pessoas afetas a esse estudo deveriam ser sociólogos, antropólogos e administradores escolares. Os estudos de comunidade realizados pelo Prof. Wagley e seus estudantes seriam valiosos nesse sentido, como também o seria o estudo que atualmente realiza em Itapetininga, Oracy Nogueira. Tais estudos poderiam ter como resultado um novo planejamento dos currículos das escolas primária e secundária das pequenas cidades e zonas rurais.

E-

Estudo de crianças e adolescentes no Brasil

1. Estudo de uma amostra estratificada de crianças e adolescentes de vários tipos de comunidades do Brasil. Isto implicaria na elaboração de uma coleção padronizada de entrevistas e outros métodos a serem aplicados às crianças e adolescentes em vários lugares diferentes. Esses métodos deveriam ser algo semelhantes aos empregados em outros países, de forma a permitirem a comparação da juventude brasileira com a dos demais países onde muito já tem sido realizado nesse sentido e poderia ser aproveitado aqui. O trabalho de D. Lúcia Pinheiro na Escola Guatemala sobre os interesses das crianças seria útil nessa pesquisa. Também se enquadraria bem neste esquema o estudo de adolescentes projetado pelo Centro Regional de São Paulo.
2. As funções das escolas primária e secundária na vida de crianças e adolescentes. Uma vez coletado e organizado o material sobre os jovens, com o conseqüente conhecimento de suas necessidades e aspirações na vida, seria possível descobrir quais as funções das escolas primária e secundária para vários tipos de jovens. Este estudo teria como resultado sugestões para a reforma do currículo, para modificações nos requisitos de admissão à escola secundária e para o melhoramento da educação do professor.

Este estudo exigiria a colaboração de psicólogos, e

técnicos em currículos e administração escolar. Êste é um campo em que o Prof. Havighurst tem tido grande experiência.

De maneira geral, sugere-se que o Centro se fixe em um ou mais projetos de estudo mais importantes, do tipo acima delineado, e forme uma equipe de trabalho para elaborar êsses projetos. Isto exigiria auxiliares de pesquisa ou técnicos encarregados do projeto, além de consultores que colaborariam em vários regimes de horário. Cada projeto teria um diretor ou dois co-diretores-pessoas com alguma experiência, porém relativamente moças, capazes de se desenvolverem com esta experiência e de se transformarem em líderes da educação brasileira. A supervisão geral do projeto caberia ao quadro superior do Centro. Êsses projetos deveriam ter a duração mínima de dois anos.

RJH/CSC/AC.

T b P M

SUGGESTIONS FOR THE STUDY OF PROGRESS OF  
CHILDREN IN PRIMARY SCHOOLS

Robert J. Havighurst  
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Dr. Seguin has given us an excellent overview of the problem of progress or lack of progress of children through primary schools, with a comprehensive statement of the possible and probable causes of their difficulties.

The next steps are (1) to formulate a plan for the research and (2) to recruit and assign staff for the work.

As Dr. Seguin so clearly states, the causes of difficulty for children in the schools may be placed in five categories.

1. The school program and its demands on pupils.
2. Methods and quality of teaching.
3. Home backgrounds of pupils.
4. Tests and methods of promotion used in the schools.
5. Abilities and other personal characteristics of pupils.

There can be no doubt that all of these categories have a bearing on the successes and failures of pupils. It would be a good thing, however, if we could go further, and find out which are the most serious causes of difficulty for children. This can only be done if we can measure or categorize the several factors. For example, we can measure the intelligence of pupils with one or more tests, and therefore we can determine to what extent intelligence as we measure it is related to success or failure in school. We can do the same with socio-economic status of parents.

But we cannot so readily measure or categorize the nature of the school program, or the tests and methods of promotion--numbers 1 and 4 of the list of categories given above. This suggests that these two categories should be treated separately from the others, for the present. They probably should



be examined critically, but I do not see how we can arrive at a definite conclusion concerning the extent to which they are responsible for difficulties in the schools. (I do see how an experiment might be made, if we had ideal conditions--as follows: Suppose we had a valid measure of the children's mental achievement, and that we could accept this measure as the criterion for success in school. Then, if we could experiment with a variety of school programs, and with a variety of methods of promotion, we could find out what school programs and what methods of promotion were associated with high mental achievement. But this kind of experimentation is not being considered at present.) Consequently I suggest that these two aspects--school program and methods of promotion--be examined critically by a jury of experienced educators, while the actual research on children and teachers in the pilot project be concentrated on the other three categories of causes and failures of pupils.

#### Proposed Design for Research on Promotion of Children

Assume that we have three categories of causes of successes and failures of pupils, and that we can measure these factors in one or more ways. These factors all operate together, and a major research problem is to sort out the various factors and find out how much they contribute to success or failure of pupils. If we had large numbers of children and plenty of money and time, we could vary each factor while holding all others constant. For example, we could hold quality of teaching, home background and personal adjustment of pupils constant, while varying intelligence, and thus find out exactly how intelligence is related to success or failure in school. But this would be too expensive, at least for a pilot project.

The easier and cheaper method is to use a simple analysis of variance design. With such a design we could allow all the factors to vary at the same time, and still discover how much of the "variance" of success or failure is due to each factor or combination of factors. I will sketch out such a scheme.

Suppose we study several hundred children in the first grade of school, most of them in their first year of school, but some repeating the first grade for the second year. At the end of the first year, we can divide these children into three groups:

- A. Those who pass the first grade in their first year.
- B. Those who fail the first grade in their first year.
- C. Those who fail the first grade for the second time.

(Note: There is also the group who pass the first grade after spending two years there, but we will ignore this group, for purposes of simplicity.)

Suppose we select, from the group of children we are studying, by a random method, 100 children in each of groups A, B, and C. (The number could be larger, but I use 100 for simplicity; also I use equal numbers in the three groups to make the research design simpler.)

We now have groups A, B, and C, and we have the following data on these children:

1. A rating of the quality of the teachers they have had during the year.
2. A categorization of the method of instruction used with these children during the year--method of teaching reading, or of arithmetic, or general method used in the class.
3. A measure of socio-economic status of each child.
4. A measure of the extent to which the home (mainly the parents) support the work of the school, based on interviews with the parents and teacher.
5. One or more measures of intelligence of each child. This may be a composite score from several tests, or it may be a set of scores from the tests used separately.
6. A measure of the achievement of each child in reading, in arithmetic, and in general information.
7. A measure of the emotional adjustment of each child, based on one or more personality tests, or upon some form of check-list filled out by the teacher, or a composite of these.

It is assumed that we have reliable measures of these various variables. It is not assumed that the measures are valid. They can be repeated, with the same results, and they have some kind of common sense meaning--that is all we need.

Given these measures, we have simply to compute the average scores of the children in groups A, B, and C, to get a Master Table which immediately tells us a great deal.

The Master Table looks like the following.

Variable	GROUP		
	A Success	B Failure	C Double Failure
Quality of Teacher	X	X	X
Type of Method a			
b			
Socio-economic Status			
Motivation from Home			
Intelligence a			
b			
c			
Achievement a			
b			
c			
Emotional Adjustment a			
b			
c			

In each cell is an average score, except for the cells dealing with Type of Method. The method of instruction probably cannot be rated on a linear scale, but must be categorized, and the numbers of children being taught by each method indicated in the table.

But the Master Table does not tell us how the several variables combine to increase the chances of success or failure of pupils. For instance, a good teacher may increase the chances of success of children of lower intelligence.

The Master Table also does not tell us how much of the success of children can be attributed to one or another factor, operating alone.

To answer these questions we can perform an Analysis of Variance. But this requires us to agree on one criterion of success in school. This criterion might be the marks (notas) received by the children. Probably a better criterion, for this study, would be the score on an objective test of educational achievement--a composite score on reading, arithmetic, and general information. This test should be short enough to be used with 7- and 8-year-old children without tiring them. The tests worked out in the Guatemala school look good for this purpose.

Having agreed on the criterion measure of educational achievement, an analysis of variance can be performed with several combinations of variables, such as quality of teaching, intelligence, and socio-economic status.

Such Tables as the following can be worked out:

QUALITY OF TEACHING					
<u>Socio-Economic Status</u>	<u>Intelligence</u>	<u>Good</u>	<u>Medium</u>	<u>Poor</u>	<u>Totals</u>
High	High				
	Medium				
	Low				
Medium	High				
	Medium				
	Low				
Low	High				
	Medium				
	Low				
TOTALS					

Other useful analyses of variance might deal with Motivation from Home, Emotional Adjustment, and Intelligence; Quality of Teaching, Emotional Adjustment, and Socio-economic Status.

In general, for ease of computation, I would suggest that variables be selected for study in pairs or trios.

Correlation Studies

Another way of estimating the relative importance of various factors in the success or failure of pupils is to compute the correlation coefficients between success in school (achievement test score or school marks) and the other factors. The difficulty with interpretation of correlation coefficients is that a relation between any two variables will cause them both to be correlated with a third variable. Thus, if socio-economic status and intelligence test scores are positively correlated, a positive correlation between school achievement and intelligence will also show as a positive correlation between school achievement and social status

