DETERMINANTS OF EFFECTIVE SCHOOLS IN INDONESIA

BY
STUDY TEAM

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PREFACE

This state of the art review is the first attempt in the Indonesian research environment on the Determinants of Effective School undertaken in colaboration with Project Bridges and other participating countries from the Asian region, namely Malaysia, Nepal, Philippines, Sri Lanka and Thailand.

The main purpose of the study is to review all available and relevant research reports, articles, and other documents related to "Determinant of Effective Schools" at the primary and secondary school levels.

The Indonesian team identified 72 research reports and articles of that type, but only 35 of them could meet the project requirement.

The study also tries to identify gaps that still exist in this field of study so corrective and follow-up measures in terms of further research and studies can be undertaken in the future in the course of developing the science of education, in particular in helping the policy makers.

This paper composes of four parts: part one is a brief description on Indonesian educatiion system; part two is the presentation of research finding; part three is about the synthesis of all relevant research findings on the determinant of effective schools and the last part of the paper contains some conclusion and recommendation.

Jakarta, October 1986

The Team

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CHAPTER I

INTRODUCTION

In this chapter the following topics are presented:

1. Structure of the Educational System
2. Development of the Educational System, and
3. Problems, Priorities, and Prospects

A. Structure of the Educational System.

The national goal of education in Indonesia, as contained in the Preamble to the 1945 Constitution is "to protect the whole of the Indonesian people and their entire native land of Indonesia and to advance public welfare, to develop the intellectual life of the Nation and to contribute to the implementation of an orderly world which is based on lasting peace, freedom, and social justice". In this goal, to develop the intellectual life of the Nation is the task and responsibility of the national education system.

In order to achieve the national goal via development education sector, the 1945 Constitution, Chapter XIII, Article 31 states, "(1) Every citizen shall have the right to obtain education, and (2) The Government shall establish and conduct one national system of education which shall be regulated by statutes".

The aim of education in Indonesia is to enhance full devotion to God Almighty, to develop intelligence and skills, to promote good conduct, to strengthen personality and to augment the national spirit and love of the country, to bring about, the growth of the development oriented people who are

able to develop themselves and willing to take joint responsibility for the development of the nation. The national education system shall be based on Pancasila, the Principles of the State's philosophy, and the 1945 Constitution.

Like many other countries in the Region, in Indonesia education can basically be classified into formal education and non-formal or out-of-school education. Formal education consists of general education, vocational education, professional education, religious education, and armed-forces education; whereas out-of-school education comprises skill education, education of broadening of outlook, and family education.

General education prepares the students to obtain basic abilities and skills to continue their education or to enter the labour world. Vocational education prepares the students to master certain skills to enter labour world and simultaneously to equip them with skills to continue their study to higher vocational education. Professional education improves the competence of the students in carrying out their tasks. Religious education prepares the students for their tasks in religious fields. Armed-forces education prepares and enhances the capabilities of the students in carrying out [redacted] tasks as members of the Indonesian Armed-Forces.

[redacted] Out-of-school education provides educational programmes that make it possible for the development of the students in socio-cultural and religious fields, skills, and/or expertise. Through this type of education, every citizen can widen his/her intellectual outlook and improve his/her personal quality by applying the principle of lifelong learning. Skill education prepares the students to obtain the abilities in the services such as typing or sewing. Education for broadening of outlook makes it possible for the students

to widen their intelectual outlook. Family education gives basic knowledge and skills, religion and belief in the One and Only God, moral values, socio norms, and life views that the students need in order to be able to live in the family as well as in society. In terms of educational level , the existing structure of school education consists of primary education, secondary education, and higher education. (Please refer to Figure 1 on the Structure of Education).

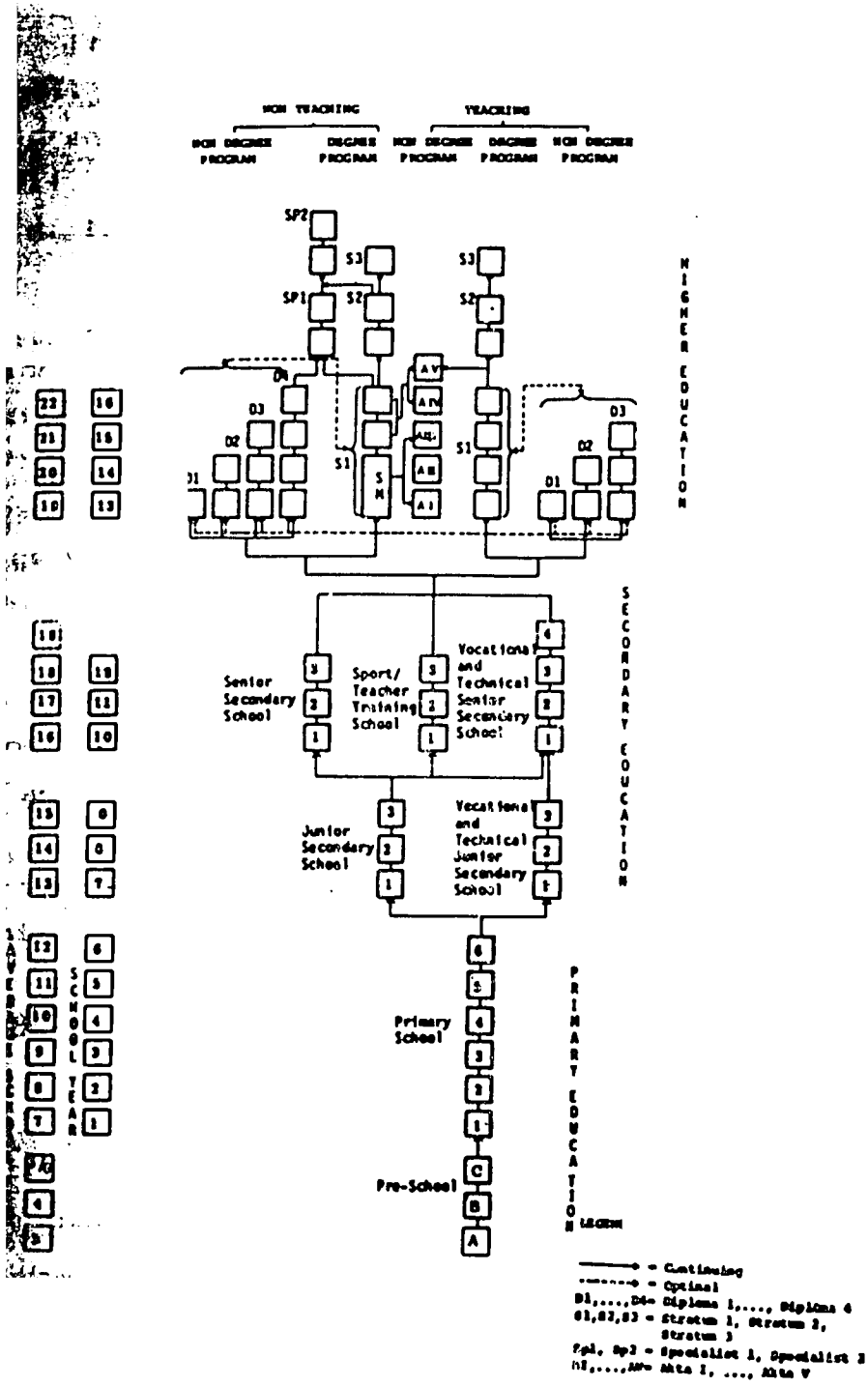

Figure 1.

Structure of Education in Indonesia

(Source: Education in Indonesia in Brief)

Primary education consists of pre-school and primary school. Pre-school has maximally a three year programme for children before they are seven years old. It is one unit in itself. The primary school is also one unit and lasts for six years. It is meant for children in the 7-12 age bracket.

Secondary education consists of junior secondary and senior secondary school. The junior secondary school consits of a general one - the Junior General Secondary School (SMP) - and technical or vocational school. They all last for three years. Those eligible for the junior secondary school be it general, technical or vocational, are primary school graduates.

Senior secondary school consists of general, technical or vocational, and teachers' school. Each one of them is one unit and has a three year programme. However, some technical and vocational senior secondary schools have four-year programmes. They are open for SMP graduates. Those finishing technical or vocational junior secondary school can only continue to the relevant technical or vocational senior secondary schools.

Having in mind the complex objective of higher education, where university graduates are to meet the diverse needs apart from the fact that students' abilities vary, higher education is structured in a multi-strata way.

Structured this way, higher education has two courses - degree and non-degree courses. The degree programme has various strata; Stratum 1 (sarjana or master), Stratum 2 (magister), and Stratum 3 (doctorate). The non-degree programme offers the following courses: Diploma 1, Diploma 2, Diploma 3, Diploma 4, Specialist 1 and Specialist 2. Basically, non-degree courses are terminal. The degree programme emphasizes

academic or professional academic aspects, whereas the degree course stresses the professional practical aspects. (See also refer to Figure 1.)

Development of the Educational System

During 1978--1986, policies and programs dealt with the equity in education and expansion of educational opportunities; maintenance of educational standards and improvement of the quality of education at all levels; the development of the system of education in keeping with national development; efforts to promote adult education; and enhancing the effectiveness and efficiency of educational management and administration.

Primary Education

Primary education in Indonesia consist of six grades. For the past decade the government has been carrying out a large scale programme of expansion of primary education. This program has led to universalization of primary education for children of the age group of 7 to 12 years.

To achieve the goal of universal primary education, besides the regular primary school, the Government is also providing Special Primary School, Integrated Primary School, SD PAMONG (Instructional Management by community, parents and teachers), Madrasah Ibtidaiyah (Islamic Primary School), and Programme Kejar (learning by doing) Package A.

The expansion and provision of equal opportunity for ...ary education during 1978--1984 was conducted by ...reasing the participation rate in primary education, ... 79.1 percent in 1978/1979 to 97.2 percent in ...83/1984. This increase covered 17 milion pupils age 7--... years compared to 23.2 milion population of the same ...ges in 1983/1984. The total number of primary school ...tudents increased from 22.4 milion in 1978/1979 to 28.9 ...lion in 1983/1984. This increase was succeeded ...rincipally by the construction of more than 74,700 new 3--...lassroom school buildings in all parts of the country, ...rban and rural areas. These schools were either 3 or 6 ...classroom buildings, depending on the need and geographical ...distribution. In addition, 110,700 classrooms were added ...o existing schools, 373,700 educational personnel were ...provided. At the same time parental donation to ...education development (SPP) were abolished, experiments ...were initiated with Small Schools, the PAMONG systems, and ...the Kejar system, as well as a variety of educational ...programmes was set up to fulfill the needs of the communi-...y; including the disadvantaged groups.

Compulsory education has been introduced in the ...mework of expanding educational opportunities at the ...mary level, both in school and out-of-school. Education ...compulsory for every citizen of a certain age to ...rcise his or her right to receive education.

With the provision of various educational ...titutions and facilities, the implementation of ...pulsory education will not burden the citizens because ...they have a choice to send children to school or any ...programs developed at the primary level.

ondary Education

The Junior Secondary School consists of two types of chools, the Junior General Secondary School and the Junior ocational and Technical Secondary Schools. The demands for secondary education is increasing rapidly and had already exceeded the capacity of public sector schools. Private schools have sprung up to meet the demand. Public and private secondary schools enrollment at the Junior Secondary School complement each other geographically.

Gross participation rate of Junior Secondary school had increased during 1978 -- 1984 from 28.4 percent in 1978/1979 to 44.0 percent in 1983/1984. Students had increased from 2.6 million in 1978/1979 to 4.7 million in 1983/1984.

The Senior Secondary level covers Senior General Secondary Schools, Senior Vocational and Technical Schools, and Senior Secondary teacher Training Schools.

Gross participation rate of Senior Secondary School ncreased during 1978--1984 from 14.7 percent in 1978/1979 o 25.3 percent in 1983/1984. The students had increased rom 1.2 million in 1978/1979 to 2.5 million in 1983/1984.

gher Education

Higher Education in Indonesia is a post independence phenomena and since 1945 there has been a rapid growth of several state universities and private institutions of higher learning. One leading guidance principle in the development of higher education in Indonesia is the trilogy "Tridarma" principle. A university has a developmental role to play, both at the regional and the national levels.

s role, according to "Tridarma" consist of the following ements: the development of human resources that will be ded for economic and social development; the conduct of earch as a means for the advancement of knowledge and ciety; and the creation of a center for community rvices.

Net participation rate in higher education during 1978--1984 increased from 2.5 percent in 1978/1979 to 5.1 percent in 1983/1984. Number of students had increased from 389,000 in 1978/1979 to 805,000 in 1983/1984. To support a more balance equality in education at the tertiary level, in 1984 an Open University was established consisting of selective departements adjusted to the needs of manpower.

The whole system and structure of higher education is in a process of change. The main features of the system are called "multistrata" replacing the inherited "mono-stratum". Within the desired shift to the system, university education consists of two main streams, academic and occupational/professional. The later leads to diploma accreditation.

The selection of new university students (SIPENMARU) aims to get prospective students who are academically sound and considered able to finish the study programme within time, limit through tracing their abilities as early as possible (during their Senior General Secondary School years) and through entrance examinations. On the other hand it is strived to eliminate socio-economic factors that impose constraint for students with high academic abilities to study at a public university.

The Open University aims at increasing opportunities the society to purpose higher education without arily leaving his home or work. The self uctional materials are presented in printed form and media, such as the PALAPA Domestic Satelite unication System, TV and Radio Broadcasts, conference, video text and facsimile, i.e. transferring copy or reproduction of printed materials instantly from place to another, the copy being made at the receiver's d.

Non-Formal education

During 1978--1984 improvements of non-formal education in the form of community service, particularly for illiterates and young people who were neither ir school nor employed, took the form of a variety of educational activities sponsored not only by the government but also by the community. In addition, improvements were made to improve quality of personnel and increase the teaching/learning cilities and infrastructure. The Community Education ram reached approximately 8 million illiterate people 10--45 year, including people who had no fixed income, who had never received any kind of formal education, those who had not yet been reached by existing educa- facilities. Also involved were school dropouts who not met the requirements of their schools of those were graduated from one level of school but had no , and those who still needed education although earning permanent sorce of income.

In connection with the development of out of school education, 57.9 million Package A books and 11.6 million Package A supplementary books were distributed as one of

steps to improve educational activities. In addition, se steps included the supply and improvement of approxi-ely 2,800 sets of study supplies package and 391,000 of job supplies package. Improvements were made in ysical plants, including the expansion of 100 Learning nters (SKB) and the construction of 38 new ones, the onstruction of 6 Community Education Centers (BPM) and the xpansion of 2 Centers for the Development of Learning ctivities (BPKB). Furthermore, 29,100 Community education nstructors were trained throughout the country.

It should be noted that illiteracy eradication programs in Indonesia are aimed at combatting three kinds of blindnesses, namely blindness in the Indonesian language, blindness in latin characters and Arabic numerals, and blindness in basic knowledge.

ocational and Technical Education

The needs for middle level manpower will continously rease in the next stage of development. Therefore, cation at the Technical and Vocational Schools should be asized. In this respect, the interest of the onesian younger generation should systematically be ected towards technical and vocational education.

By the end of the Third Five-Year development Plan, 983/1984, 274 Technical and Vocational Junior Secondary Schools, consisting of two types and twelve streams, and 559 Technical and Vocational Senior Secondary Schools, consisting of 14 types and 61 streams, were established.

In the meantime 58 study programmes have been selected for implementation at the Vocational Secondary School. While the identification of similar programmes for industrial and agricultural technology is being actively undertaken.

To provide better educational facilities at the technical and vocational schools, various efforts are now being carried out. These are the provision of a multi-school facilities; the provision of technical and vocational training centers; the technical and vocational schools in a certain areas; expanding learning resources outside the Department Education and Culture by recruiting teachers and instructors from the business and industrial world on a day release basis and providing opportunities to students and teachers of technical and vocational schools to gain practical experience in industry and business.

Polytechnic education is a part of the Indonesian higher education system (which is multi-strata in nature). It is a professional non-degree program which developes abilities and interests of students in psychomotoric skills, and turns out specialized technicians. Polytechnic education is developed within Indonesian higher education system to provide for greater flexibility, diversification of objectives and transfer of education in the supply of specialized and skilled manpower very much needed by the Indonesian nation and country.

Curricula Improvement

Curricula improvement is a consequence of further development of the national education system and also a response to increasing demands of the nation.

The experience and knowledge gained in the past, ng developments in Asia and the Pasific, have d the demand and efforts to improve curricula.

The improved curriculum of Senior Secondary School ns various programs, not only to prepare students et certain requirements for further studies at the sity but also to prepare those with other aptitudes, st and capabilities to receive other types of tion.

All students at the Primary School, Junior and General secondary schools are obliged to study a of subject-matters in the core curriculum.

ing and Teachers Education

The management of teachers turns out to be very nt, because their role is very decisive in achieving tional objectives of education. The strength of the s very much determined by three factors; quality, and motivation.

he quality of teachers in the Third Five-Year ent Plan was adequately increased through in e training. This in-service training will continous- ncreased, especially its organization and system, to eal results which will be usefull for the teachers ey assume teaching again.

Teacher's motivations turns out to be a key to the ss of education. Researchers show, that the majority achers do not consider to quit their jobs. They only

wants two things for themselves, to get an opportunity to continue their studies and to receive better career facilities necessary for their promotion.

C. Problems, Priorities, and Prospects

The implementation of the Fourth Five-Year Development Plan, 1984/1985 -- 1988/1989, is an endeavor to create a foundation for the Indonesian nation to continously grow and develop, and later on to strenghten this foundation in the Fifth Five-Year Development Plan, 1989/1990 -- 1993/1994, the Indonesian nation can take off to speed up the development towards the realization of a just and prosperous society based on Pancasila. The realization of efforts in this take-off takes, on the one hand, the form of abilities to develop education and culture on our own, and on the other hand, to finish preparing development manpower for the take-off.

The average rate of economics growth to be accomplished in the Fourth Five-Year development Plan, the average rate of population growth can be maintained at 2.0 percent, then the average rate of real national product per capita will increase with 3.0 percent annually. This means at the end of the Fourth Five-Year Development Plan the people's welfare be more improving.

This average rate of population growth of 2.0 percent in the Fourth Five-Year Development Plan is estimated to increase the Indonesian Population by 17.5 million i.e. from 158.1 million in 1983 to 175.6 million in 1988. This means an estimated increase of 3.5 million per year. The natural factor of population growth will increase the flow of children to the primary school and in turn these primary school

graduates will be influxes to the next higher schools. Part of this flow of students will become a work force filling in work opportunities which are required to support economic growth. The educational efforts are meant to improve the quality of the Indonesians which are directly required to maintain and increase economic growth.

The average rate of economic growth of 5.0 percent annually in the Fourth Five-Year Development Plan will shift the economic structure, from an agricultural sector at the end of the Third Five-Year Development Plan to a beginning of an industrial sector towards the end of the Fourth Five-Year Development Plan. The role of the agricultural sector is estimated to drop from 29.4 percent in 1983 to 26.6 percent in 1988. Whereas the industrial sector will increase from 15.5 percent in 1983 to 19.1 percent in 1988, while other sector will relatively remain unchanged. The shift in the economic structure from agriculture to industry during the period of the Fourth Five-Year Development Plan will take place when the natural population growth reaches 17.5 million. In other words, realizing that the greater part of this natural addition of population will increase the students' flow and the other part will become a work force, the policies of development of education and culture should take into consideration the impact of the shift of economic structure.

The average rate of economic growth of 5.0 percent annually should also be supported by a growth of new work opportunities, which should be emphasized in the industrial and construction sectors. Therefore, the need to increase education and the required skills in the Fourth Five-Year Development Plan should also be centered on those sectors. In the meantime it should be noted that the effort of improving

and skills is a long-term process, so that in the of work force should also bear in mind the lead time pse required to improve education and skills.

total work force required to support the 3.2. average annual growth of work opportunities in the ve-Year Development Plan is 9.2. million, i.e. from illion in 1983 going up to 71.6. percent in 1988. Of 2. million increase of work force, 2.6. million are on the service sector, 2.3. million trade, and 1.9 on industry. Efforts to increase abilities which are ly required to back up economic growth in the Fourth year Development Plan will, therefore, be centered on the trade and industrial sector.

If the 9.2. million work force can be provided, it still be borne in mind the existence of 12.9 million sed unemployment (i.e. those working less than 27 hours k) in 1980. Therefore, efforts in increasing education kill should also consider this problem of disguised yment.

summary, it is clear that in the Fourth Five-Year ment Plan the strong factors underlying educational and development efforts are those to accomplish an ave- ate of economic growth of 5.0 percent annually, which be supported by a work opportunity expansion rate of ercent per year. This means that there should be an se of 9.2 million work force, while the population se is estimated at 17.6 million apart from the 12.9 on disguised unemployment in 1980. The previously men- d factors are observation of aspects which are directly ired to increase economic growth.

Apart from considering the economic growth and the labor market in the future and student growth, it is also necessary to consider various other aspects of our life as a nation and a country. Of the most important aspects to be considering, among others, are the following:

The national culture which takes the form of a unity in diversity, and which is a way of life inherited from the ancestors of the Indonesian nation, has moral values and beauty, and it will undergo growth and development so that it will be richer and exalted. The Bahasa Indonesia (Indonesian National Language) and the regional languages, certain beliefs, certain science, certain values and regulations, and certain literary and art creations are real manifestation of the culture of the Indonesian nations. The national culture allows the Indonesian Nation to have its own national identity among other nation in the world.

The development of science and technology in Indonesia which currently is still a transfer of science and technology from overseas means dependence upon foreign countries. Therefore, there is need for a pursuit to have national abilities to self-develop science and technology.

In the future, during the nineteen-eighties, the priority of the development of educational system will be focused upon:

First, to implement national education on Pancasila not only through increasing intelligence and skill but also enhancing full devotion to the one Supreme God, improving character, perfecting personality and strenghtening nationalism and love for his country, in order that one can always learn and work on his own capability which is beneficial for himself, his family, his community and the nation as a whole. The

[redacted]nsive implementation of the guide to the Comprehension and [redacted]ctice of Pancasila, Education of the Moral Pancasila, [redacted]uld also be carried out through upholding courtesy based on [redacted] principle of family spirit endowed with harmony and balanced within the school and campus circles. The teaching of the History of National Struggle for Independence is carried out at schools to sustain and develop the spirit of the 1945 values.

Second, to develop educational personnel, improving their quality and welfare as well as making the necessary effort to establish the minimum requirements for educational personnel.

Third, to take steps to carry out the compulsory education movement throughly for children of the age group of 7 to 12, which is planned to be accomplished completely (100 percent) in the year 1986--1987.

Fourth, to improve the quality and relevancy of education which is derected towards the goal of making every member capable of facing the future with readiness sufficient to be developed further in accordance with the challenes and hopes of his environment including bite itself which becomes increasingly more complex due to the progress of science and technology.

Fifth, to expand the opportunity to receive education at the secondary level by increasing the capacity both within and outside the school system, and by enhancing the participation of private educational institutions. Special attention is given to talented children by proving scholarships for those who are talented but less fortunate financially.

Sixth, to build new school buildings while keeping in mind their spread locations, the provisions of library facilities, a room for skill training and practice, the provision of textbooks, audiovisual aids, as well as the maintenance of the entire educational facilities. All these are intended to secure and improve the quality of education and the extension of the opportunity to get education.

Seventh, to enhance vocational and skill education as part of the national system of education, with the aim of developing a mechanism which can stimulate the business of vocational and skill training in a unified and solid system so that there is a close-link between the education and the world of work. Various kinds of vocational and skill training will be adjusted to fulfil the available work opportunities.

Eighth, to make institutions of higher learning more active in implementing the Almamater Insight in the effort of making them the become truly scientific institutions and of making the campus a scientific community by implementing institutionalization and transpolitization in the conduct of association on the basis of the principle of family spirit and by holding harmony and equilibrium in high esteem. The quality and capacity of private institutions will be increased in a more directed and unified manner in order that they can offer adequate education. In meeting the need for technically skilled personnel, professional and polytechnical expertise will be more developed and intensified.

Ninth, as it is now, to carry out education not only in school but also within the family circle and community. Furthermore, education is not the responsibility of the government but also the family, the community, and the learner himself. Community education is directed as such that each member of the community can as early as possible and through-

out his entire life have the opportunity to acquire the necessary knowledge inclining towards income generating fields of work to be done collectively, in the framework of creating a community which learns, works and does income generating activities.

Tenth, to improve the education and instruction of the Indonesian language at all types and levels of education within and outside school system. To foster and develop the spoken and written Indonesian language, to enhance the good and correct usage and to take up with the Indonesian language as a national language and the ethnic languages as elements of culture.

Eleventh, to develop library and publication, the writings and translation of books and other publications.

Twelfth, to stimulate the community interest in sports achievement, by improving physical as well as mental health of every member of the community and by popularizing sports.

Thirteenth, to build an integrated information system using computer that incorporates increasing capacities to prepare data and information needed for effective decision making and policy formulation.

Fourteenth, to emphasize, on educational service and management achieving better efficiency and effectiveness in the program implementation of all elements and organizational units in the fields of education.

Fifteenth, to tighten control in the field of education by forming a government apparatus for the implementation of program to meet the needs adjusted to the volume and complexity of the problems arising in the implementation of educatio-

programs. For this purpose the establishment of a unified integrated system of supervision is carried out in order achieve the improving efficiency in the utilization of development.

Sixteenth, to improve policy research and development in the field of education and national development in general. Efforts to prepare inputs needed for policy formulation and recomendation shall also be emphasized.

Seventeenth, to finalize the formulation the educational constitution conception regarding the fundamental of the national system of education.

CHAPTER II

RESEARCH REVIEW ON DETERMINANTS OF EFFECTIVE SCHOOLS

In this chapter we will summarize a number of research reports dealing with the determinants of effective schools. Here we will discuss three out of seven research sub-topics as mentioned in the "Project Bridges" document. The three topics are: (1) efficacy of non-traditional intsructional methods, (2) utilization of instructional materials and other resources in the classroom by teachers and students, and (3) determinants of retention, promotion and transtition. The discussion of these topics is based on 35 research reports, the abstract are in Annex I.

The choice of the three topics is primarily based on the relevant problems of primary and secondary schools in Indonesia which urgently need serious attention through research and/or better policies either at the national or regional levels. The choice is also based on teh fact that most research done in Indonesia related to the determinants of effective schools fall in to those three categories. The problems concerning primary and secondary education faced by the Indonesian goverment during the last two decades are those related to improvement of educational quality; the improvement of relevance of education towards development; the expansion of educational opportunity, especially at the primary educational level at the framework of succeeding the compulsory education program for the children aged 7 to 12 years old; improvement of the efficiency and effectiveness of the educational implementation; and improvement of the entire educational system in order to further support national development.

The selection of the 35 research reports is also based on other factors such as adequacy of the research reports in its methodology being used and that the research is not descriptive in nature, but rather analitycal.

As mentioned in the "Project Bridges" outline, in this study of the arts review attention is focussed only to research in primary and secondary education. At secondary level, there are two kinds of school; general and vocational schools. The secondary school is devided into two levels - junior and senior secondary schools with total six years programe. The senior general secondary school offered three streams namely, Science (IPA), Social Studies (IPS) and Language (IPB). Studies dealing with this type of school generaly include students from all streams.

1. Efficacy of Non-Traditional Instructional Methods

Non-traditional methods of intruction have been used in a number of programmes in primary as well as secondary schools. They used a mudular system as a method of instruction. However these programmes have different objectives. Consequently, there are also differences in the utilization of mudular system in these programmes.

At primary school level, the modular system is applied in "SD PAMONG" (Instructional Management by Community, Parents, and Teachers), Small school and the Development School Pilot Project (PPSP). At the secondary school, the modular system is used at the Open Junior Secondary School (SMP Terbuka) and PPSP school. The curriculum being used in these schools is the same with that used in the regular school. After the students finish the study they can take final school examination and get the same school certificate as those from the regular schools.

imary School

SD PAMONG is aimed at educating primary school aged children and the primary school drop-outs who cannot go to school regularly due to social economic problems. The PAMONG system assumes that teaching learning process can happen not only in the classroom conducted by teachers, but also happen outside the classroom with the help from parents and members of the community. With that assumption SD PAMONG is established to help children to get education.

In SD PAMONG the modules are used at the third grade upward, assuming that the pupils at this grade have been able to read and write, and to understand Indoensian language well.

Beside self-learning, the students at SD PAMONG are also helped by teachers. Their main role is to manage the teaching learning process and the learning material being used.

The subject matters which are taught by using modules consist of Pancasila Moral Education (PMP) Indonesian language, Social Studies (IPS), Science (IPA) and Mathematics. Face to face approach is still used in others subject.

Some studies tried to examine the impact of the modular system in the SD PAMONG on students' achievement. For instance, Soenarwan (1982) studied the comparison between the achievement of the SD PAMONG students and that of regular school students on Social studies and Mathematics. The results showed that there was no significant difference in their achievement between the students of those two different school systems.

The factors which were thought to determine this ult were among athers, (1) the education of the local munity around the SD PAMONG which was still low, and (2) need for achievement of the SD PAMONG teachers which relatively lower than that of the regular primary school. It must be noted that community members have a role as resource person for the SD PAMONG students.

Another study (Tolle, 1982) concerning SD PAMONG and the regular school revealed that there was no significant relationship between students' attitude and parents' socio-economic status on the one hand and the students' achievement on the other. The results of the study also showed that there was no significant difference on the attitude between parents of the students in the SD PAMONG and the regular school.

In practice, "programmed teaching" is used in the SD PAMONG in which students from higher grades can teach the students from lower grades. This method of tutorial is called "brother tutor" method. In this method it is expected that the brother tutors can take the role of the teachers in the teaching learning process.

A study related to this method (Muntasir, 1982) showed that in general there was no difference achievement between students taught by using the "programmed teaching" and those taught by using "traditional methods".

Beside SD PAMONG, The small school also use a modular system as its method of instruction to primary school age children who live in remote areas in which the establihment of regular primary school is not efficient.

The characteristics of the Small School are among others:

a. Having a small number of student, usually less than 100 students;
b. Having three teachers, including the headmaster;
c. Having three classrooms;
d. Combining more than one grades in a classroom;
e. Modules are being used in the fourth, fifth, and sixth grades;
f. Using a tutorial system;
g. There is a voluntary community involvement in the teaching of subject matters such as relegion, vocational skills, arts, and sports.

In regards to the impact of the Small School, a team of the Office of Educational and Cultural Research and Development (Balitbang Dikbud) and the University of Sebelas Maret (UNS) studied the comparison between tne achievement of the students in the Small School and the students in the regular school. The study involved students from first to the sixth grades with five main subject matters - Pancasila Moral Education (PMP) Indonesian language, Science (IPA), Social Studies (IPS), and Mathematics. In general the students from the Small School achieved hihger than their peers in the regular school.

Development School Project (PPSP) also used modular system as its method of instruction, accompanied with the use of other innovative components such as mastery learning, streaming system, and guidance and counseling, and different lenght of schooling- that is, five years for primary school (instead of six years), three years for junior as well as for senior secondary school respectively, continuous progress system, one school management

[redacted]m (from primary to senior secondary), and terminal [redacted]tional programmes. As mentioned, the PPSP school [redacted]ludes primary and secondary school level.

A study conducted by an Evaluation Team of The [redacted]rriculum Development Center of Balitbang Dikbud (1981) revealed that students from the PPSP school achieved higher Mathematics , Social Studies, and Pancasila Moral Educatioan while students from regular school achieved higher in Indonesian language and Science.

Another study which examined the achievement of the sixth grade students of the regular school and those of the fifth grade of the PPSP school (Soediarto, 1981) showed contardictory results. It was found that the PPSP students achieved higher in Science and Indonesian language, while the regular school students achieved higher in Mathematics and Pancasila Moral Education. The results also showed that students positive attitudes toward Mathematics and Science affect their achievement in the respective subject matters.

A study conducted by Munaf (1982) showed similar results as found by Soediarto (1981). He found that of thefifth Graders of the PPSP achieved better in Science than their comparable peers of the sixth graders from regular primary school. Beside that, the study also showed that there was a positive relationship between students' achievement in Science and other factors such as learning ability, availability of learning facilities at home, and educational level and economic status of parents. The finding applies for both PPSP as well as the regular school students.

Affandi et. al. (1984) who studied the impact of the PPSP school also found somewhat contradictory results. He

compared the achievement in four subject matters (Science, Mathematics, Social Studies and Indonesian language) between the PPSP of the third graders and the fourth graders of the regular school. They found that the students from the PPSP school tend to achieve better in Science and Social Studies, while the students from the regular school achieve slightly better in Indonesian language and Mathematics. However, the differences above were not significant.

2. Secondary School

A modular system is also used as a method of instruction in the PPSP school and Open Junior General Secondary School.

The impact of using modules in the PPSP school, like in the PPSP primary school level, was not always positive in term of students' achievement, compared to the use of the conventional method in the regular school -that is, the students of the PPSP school did not always achieve better than their peers from the regular schools.

The study conducted by The Evaluation Team of the Curriculum Development center of the Balitbang Dikbud (1981) showed that at junior level, the PPSP students achieved better in Indonesian language, Pancasila Moral Education and Science; while the students from the regular school achieved higher in English, Mathematics and Social Studies. At the senior secondary school level, the regular school student from the Social Science stream achieved better in Indonesian language, Geography, Pancasila Moral Education, English, and History; while PPSP students achieved better in Mathematics and Economics. On the other hand, PPSP students from Science stream achieved higher in

Indonesian language, Mathematics and Pancasila Moral Education; while the regular school students achieved better in English, Chemistry, Physics and Biology.

Another similar comparative study on Science achievement among junior and senior secondary school students was conducted by Munaf (1982). The results showed that in general students from regular school achieved better than their peers from PPSP school.

Another similar study showed contradictory results (Sastromihardjo, 1982). He conducted a comparative study among three different systems of instruction - a modular system of instruction in PPSP school, a modular system of instruction with lesson plan for instructional system, and the classical system in regular school. The study dealt with Science achievement of senior secondary school students. The results showed that students from PPSP school showed the highest achievement, while the students from regular school had lowest achievement. The results also showed that there was an interaction between the effect of a method of instruction and students' learning categories towards students' achievement.

As mentioned before, beside a modular system, there were other innovative instructional components being experimented in PPSP school. In relation to this, Kasmadi et. al. (1980) conducted a comparative study between the PPSP the fifth grade students who have undergone mastery learning, continous progress, and remedial teaching programs; and regular school sixth grade students on their performance in the secondary school and in the society. The results showed that the PPSP school students were able to learn the subject matters as required by the same curriculum applied in the six year ordinary primary school.

The results also showed that there was no difference between the PPSP and regular school students in their achievement and in their attitudes towards the learning problems concerning certain subject matters.

Hamid (1984) undertaking a study on the relationship between the utilization of simple Science learning aids and learning improvement, application ability, learning attitudes and solving problems concerning Sciences. The study involve the tenth graders of PPSP school and second graders of regular senior secondary school. The results showed that the students who were taught Science using learning aids obtained significantly higher scores on their application ability, development of attitudes, degree of answering, understanding about Science and achievement on Science. The results also showed that there was a positive relationship between learning attitudes towards Science, and understanding on that subject matter on the one hand; and achievement, application ability and problem solving concerning Science on the other. Beside that, the result also showed that the students who were taught with learning aids were more active in their learning participation, compared with their peers who were taught without using learning aids.

The Open Junior General Secondary School (Open SMP) is the school whose main objective is to give an alternative secondary level education in the framework of improving educational equality and improving educational quality. The school is mainly aimed at accomodating pupils who live in remote areas and those who cannot go to school everyday.

The instructional method used in the Open SMP is mainly a modular system supported by the utilization of

aching media such as audio cassetes, radio, slides, etc. he main activities in the Open SMP include self-learning sing modules, and group learning with teachers. Most of he learning activities are carried out at home and/or in he learning centre.

There has not been any study which examines the effectiveness of the use of moduls in the Open SMP. Sadiman (1984) however, studied a number of factors which might influence students' achievement in the Open SMP. But in his study he did not include students from regular school. The results which could only be applied in the context of the Open SMP showed that the factors which affected students' achievement include the followings: educational enviroment, intelligence, students' attitudes towards Open SMP, and students's educational aspiration.
The ressults also showed that only a few students who had positive attitudes towards Open SMP.

The effectiveness of the use of a modular system should not only be measured by students' achievement alone, but can also be measured by students' independency. In relation to this, Sulistiyono (1983) conducted a study which showed that there was no difference in their independence attitudes between students taught by using modules, and peers with traditional methods.

Utilization of Instructional Materials and Other Resources in The Classroom by Teachers

An effective teaching learning process in primary as well as in secondary school depends not only on the qualified students and competent teachers, but also on other factors such as educational facilities, instructional materials and other educational ressurces.

imary School

Hamid (1986) conducted a study which showed that the fifth grade students who were taught by using visual teaching aids, achieved better in Mathematics and Science than their peers who were taught without using teaching aids.

Jiyono and Suryadi (1980) studied teaching learning processes in primary schools in an agricultural area. They discovered that the inadequacy of educational facilities at school was one of the causes for low achievement of the students. In general teaching aids for teachers were inadequate. Moreover, these teaching aids had not been utilized optimally by the teachers in the teaching learning process. In general, there were still many weaknesses in the teaching learning process such as that: there had not been an adequate teaching lesson plan and effective feedback and corrective; the students' time on task was very low; and there had not been any adequate supervision by the headmaster as well as by school supervisors.

A similar study by Mangindaan et.al. (1978) showed that the inadequacy of educational facilities in primary school in rural areas caused students' low achievement in Mathematics. A study by Moegiadi et.al. (1976) also showed similar results. It showed that the inadequacy of educational facilities at school caused low students' low achievement in certain subject matters.

2. Seconday School

In regard to the utilization of educational media in the classroom by teachers, Koko and Zakir (1986) discovered the following (1) there was significant difference between

male and female teachers in their preference and effectiveness on using educational media; (2) there was significant relationships between teachers' educational background, and their teaching experience on the one hand, and teachers' ability in developing and using educational media on the other; and (3) in general, teachers often had not used the available educational media to improve students' learning motivation.

A Balitbang Dikbud team (1981) conducted a study on the effect of Science teaching aids on Sciences achievement of the students at Madrasah Tsanawiah (Religious Junior Secondary School). The results showed that the availability of Science laboratory, Science practice and supervision on teaching learning process had positive significant effects on students' achievement.

In the meantime, Suhendar (1986) who studied about the utilization of educational media (by students and teachers) at senior general secondary school, showed that eventhought every teacher knew that the utilization of educational media could improve students' achievement, they had not used the available media optimally. The study also showed that some of them felt that they had the ability to use the available educational media in teaching while some others thought that they needed further training in order to be able to use them.

Suprapto et.al. (1981) in the study showed that the availability of educational facilities (Science laboratory) at school supported Science achievement among students of the Science stream. it also showed that the utilization of visual aids among students of Science stream improved their achievement in general.

The results of studies at secondary school level have some similarities as the ones conducted at the primary school level where the researchers did not identify the types of educational media which could improve students' achievement, when they are used in the teaching learning process.

C. Determinants of Retention, Promotion, and Transition

Educational outcomes are not only determined by the educational system itself which consists of such things as teachers, students, school curriculum, teaching-learning process at school and the like; but are also determined by other things outside the educational system such as the home environment of the students, and their social environment. The first factors directly related to the educational system may be called internal factors, while the latter may be called external factors.

One of the educational outcomes on the part of students is students' achievement. In Indonesia, students' achievement is the most important factor which affect their retention, promotion, and transition in the educational system.

By using the assumption, in this part, we will not discuss about factors which with directly determine retention, promotion, and transition, but we would rather discuss about factors which affect achievement. One of the main reasons is that in Indonesia there have not been much research dealing with determinants directly related to retention, promotion, and transition.

Primary School

a. Internal Factors

A study by Surya (1977) examined internal factors in the teaching-learning process related to non-intellectual factors of the students in the first, second, and third grades of PPSP school. Students' non-intellectual factors which affected their achievement were their need and motivation in learning. But the internal factors which affected the learning process itself included students' learning attitudes and habits. Beside that, students' achievement was also determined by they childhood experiences and home background.

Mochtar et.al. (1978) conducted an exploratory study which examined the effects of educational interventions at primary school. These intervention consisted of automatic promotion, additional lessons, intensification of the use of Indonesian language, teachers' rotation, home visits, and adjustment of school holidays.
The study showed the following results:

1) Automotic promotion and additional lesson had positive effects on students who got promoted, but did not improve drop-out and absence rates.

2) Teachers' rotation had improved students' achievement, and reduced a number of repeaters, but had no effects on the drop-out and absence rates.

3) Teachers' rotation and home visits had positive effects on students' learning progress, drop-out and repeating rates.

4) Intensification of the use of Indonesian language did not have positive effects on students' achievement.

Beside students, teachers also play an important role in the teaching learning process. In presenting research results concerning teachers, implicitly they are also related to students and educational facilities. Teachers' performance at school is not only affected by their educational background and their knowledge and experiences on the teaching techniques, but also affected by other thing such as their welfare. Tirtarahardja (1981) studied about the effect of teachers' welfare on students' achievement in the Indonesian language, Mathematics, Social Studies, and Science.
The results showed that the improvement of teachers' welfare would improve their teaching performance which then resulted in better achievement of their students.

Dahlan (1982) studied about the effects of personal characteristics of the students at primary teacher schools on teaching profession. He found that in general, students at the primary teacher schools showed positive attitudes towards teaching profession. He also found that there were significant relationships between certain personal characteristics of the students and their attitudes towards teaching profession.

Saberansyah (1981) who studied about the relationship between teachers' background and the ability to read and write among the first grade students, found that factors which affected students' achievment included teachers' teaching experience, the teachers' guides (books), students' educational background at kindergarten, parents' occupations and

guidance for the students, and the availability of learning facilities at home.

Sukadji (1983) examined the effects of teachers' in service training on affective domain towards students' achievement on Indonesian language, Pancasila Moral Education, Mathematics, Science and Social Studies. The results showed that the training had positive effects on Pancasila Moral Education achievement. The effect on this achievement was stronger among boys than girls.

Simanjuntak and Dakir (1979) conducted a study on the relationship between the utilization of educational radio broadcast and teachers achievement in matics and Indonesia language. It showed that there was no significant difference in their achievement between teachers who listened educational radio broadcast and their peers who did not.

Moegiadi et.al. (1976) who studied about the sixth grade students at primary school showed that internal factors which affected students' achievement were among others: school status (government versus private schools), school size, teachers' experience, teachers' sex, teachers' age, teachers' training, teachers' status (full-timer versus part-timer), and school learning facilities.

b. External Factors

Theoretically external factors do not have direct effects on students' achievement, because they are not directly involved in the teaching learning process at

school. There have been some studies which examined the effects of some external factors on students' achievement in Indonesia.

Moegiadi et.al. (1976) showed that students' achievement was affected by father's social economic status. Similarly Soediarto (1981) showed that students' achievement was affected by parents' socio-economic status and learning environment at home. Saberansjah (1981) also showed that students reading and writing performance was also affected by the degree of help received by the students at home. Soenarwan (1982) also mentioned that the low educational level of the community arround SD PAMONG might be the cause that there was no achievement difference between students from SD PAMONG and students from regular primary schools. It is logical because the SD PAMONG system may work well only if local community can help its students to learn.

2. Secondary School

a. Internal Factor

Jiyono and Suryadi (1982) in their comparative study on the relationship between the achievement of the grade nine (Grade three of Junior Secondary School) students of the two different periods (1976 and 1981) showed that teaching learning process was one of the variables which had the most significant effect on achievement in subject matters in general.

Mangindaan et.al. (1978) who conducted a study on achievement among grade nine students showed the following results. Students from urban areas had

higher achievement than their peers from rural areas. It might be explained that in urban areas there are usually better schools with more able students from higher socio economic background. In urban areas there are also showed that students from higher socio economic status showed higher achievement. It might be explained that big schools are usually identical with good schools, with good educational facilities are available. The study also showed that there was a positive relationship between teachers' in-service training and students' achievement. The study showed that student from the morning shift had better achievement than their peers from the afternoon shift. It might be explained that the morning shift schools are usually better schools with better facilities and personnel. The afternoon shift schools usually share school facilities and buildings with other schools or offices, and have shorter learning hours.

Sukmadinata (1983) studied about the affects of teaching concepts and need for achievement of the teachers on the teaching learning outcome. The study involved the third grade teachers of junior general secondary school related to students' achievement in Indonesian language, English, Mathematics, Science and Social studies. The results showed that teachers' lesson preparation had positive affects on their teaching effectiveness. Their knowledge on teaching concept had positive effects on students' achievement. Beside that, classroom environment had effects on the teaching learning process and students' achievement.

Djaali (1981) studied about the effects of the variables such as students' learning habits, attitudes, intellectual capacity, and teaching learning process

towards their Mathematics achievement in senior general secondary school. For the Science stream, the variables which have effects on achievement were learning quality, arithmatical capacity, abstract thinking capacity, time devoted to learn mathematics, and speed and accuracy in answering questions. The results also showed that students' achievement both for Science as well as social studies stream was affected by teachers' competence, and learning and school environment.

A similar study conducted by Sulaeman (1984) showed that there was significant difference between low and high achievers in both streams in their intelligence, need for achievement, learning habits, and learning attitudes. The study also showed that students from Science stream had higher intelligence than their peers from social studies stream, but there had no difference in their learning habits between those two streams. It was also shown that three was a negative correlation between need for achievement and intelligence. It was concluded that both intellectual and non-intellectual factors of the students had important effects on achievement.

Suprapto et.al. (1981) in their study concerning third grade students of Senior High School showed the following results. There was no difference in achievement between students from rural and urban areas. This finding contradicts the findings among students in primary and junior secondary school. this is because most senior secondary school students come from urban and semi urban areas. Therefore, the grouping of the Schools into urban and rural is crucial. Similar to Sulaeman's study (1984). it showed that students from Science stream had higher achievement in Pancasila Moral

Education, English and Indonesian language. Other factors which had relationships with achievement consisted of the use of Indonesian language in daily life, the availability of books at home, school size (students from bigger schools achieved better), school facilities, teachers' experiences, teachers' in-service training, and school shifths (Morning Shifhts were better than afternoon shifhts). In addition, it was found that there were more boys than girls in Science stream, and the opposite was true for social studies stream.

b. External Factor

There are only two studies which examined the effects of external factor on achievement, among senior as well as junior secondary school students. In most studies such as mentioned above, external factors were included usually only for analysing the effects of the main variables being studied, which were classified as internal factors.

a study with analysis on external factors was conducted by Atikah (1983). It was meant to find out the effects of learning intensity within the family on students' achievement. The study involved junior general secondary school students, whose both parents worked and whose father worked. The results showed that there was no significant relationships between achievement and learning intensity in the family as shown by whether both parents worked or only the father worked. Furthermore the study also showed that learning intensity was not related to whether both parents worked or not.

CHAPTER III

SYNTHESIS

As mentioned above, students' achievement is not only affected by factors which are directly involved in the teaching learning process in the classroom and/or school--which are called as internal factors, but it is also affected by external factors which are not directly involved in that process, and which are believed to be more complex. Thus to make "effective school" we should consider both the determinants of effective school.

This chapter is aimed at synthesizing the results of the studies whose relevant findings have been presented in Chapter II. According to those findings, in this context, the determinants of effective school can be classified into six main categories:

(i) factors related to teacher
(ii) factors related to student
(iii) factors related to school
(iv) educational facilities and instructional materials
(v) family/home background of the students
(vi) social environment.

Factors Related to Teachers

1. Sex

It is concluded that female teachers tend to teach better than male teachers. Thus students taught by female teachers tend to achieve better than their peers who are taught by male teachers. there has not been any explanation from the research results, what the reason for this is.

2. Age

It is concluded that older teachers tend to teach better as shown by their students' achievement. It is probably because the older the teachers, the more experienced in teaching they are. older teachers usually are also more mature and more stable psychologically. These may influence positively in their teaching performance.

3. Teaching Experience

It is concluded that teachers with more teaching experience will performance better. In turn, their students will achieve better. it is logical because the more experienced the teachers are, the more knowledge and teaching skills they have.

4. Educational background

It is concluded that the teachers who have higher educational background tend to have students with higher achievement. It is as expected because teachers with higher educational background will have more knowledge in relation to teaching techniques as well as subject matter contents.

5. Teaching knowledge

It is concluded that teachers' knowledge relevant to their teaching profession has positive effect on their students' achievement. It is as expected because teachers with more teaching knowledge will be able to use different teaching techniques relevant to teaching conditions which can make students learn better.

In Indonesia the government has tried to improve teachers' knowledge through teachers' in-service training. It is shown that in general teachers who have been trained have better knowledge in teaching methodology and subject matter contents.

6. Lesson Plan

It is concluded that teachers who makes better lesson plan tend to teach better. Then in turn their students achieve better. It is as expected because usually teachers with better lesson preparation can have a more systematics and effective teaching learning process.

7. Teachers' Motivation

In everyday life, one's motivation is one of the most important factors which determines one's success in his/her particular job of work. Teachers with higher motivation will certainly have positive effects on their teaching performance - which in turn will affects students' achievement.

From the research review there has not been any study which examined, especially about the effects of teachers' motivation and students' achievement. However, it was implicity shown in one of the studies that teachers' low teaching motivation was one of the factors which caused no achievement difference between students of SD PAMONG and students of regular primary school. Although SD PAMONG students were expected to have better achievement than their peers from regular school, it turned out that it was not the case. One of the explanations is that because teachers in SD PAMONG had lower teaching motivation.

8. Teachers' Welfare

It is shown that teachers' welfare have positive effects on their performance - and thus in turn it can improve their students' achievement. It is logical because teaachers who are adequate financially will feel more secured psychologically. This will certainly affect their teaching performance. It is only as expected that teachers who feel insecured will perform badly.

B. Factors Related to Students

1. Intelligence

As expected it is concluded from the studies that tudents' intelligence affects their achievement. It is ellknown that this phenomenon applies for all levels of ducation. The problem is that like achievement, intelli-ence is also much affected by students' schooling. It is till a matter of argument up to the present time whether ntelligence should be included in the study of determi-

nants of achievement, because it will be found that if the "intelligence" is being controlled, other factors show very little affects on achievement.

2. Students' Educational Aspiration and Motivation

From the research review above, it shows that most research concerning students' educational aspiration and motivation was conducted at secondary school levels. Very little is known at primary school level.

From the review it was shown that students' educational aspiration and motivation have positive effects on their achievement. The problem as shown by one study involving senior general secondary school students is that, there is a negative correlation between students' intelligence and their learning motivation. Thus at Senior High School level, the more intelligent the students are the less they get motivated to learn. It might be explained that probably more intelligent students feel that they do not have to learn harder since they still can have higher achievement compared to the peers who are less intelligent.

3. Learning Habits and Attitudes

As in the case of educational aspiration and motivation, here most research on students' learning habits and attitudes in relation to achievement is conducted at secondary school levels. In this research review no information is known on this matter at the primary school level.

In general students' learning habits and attitudes have positive effects on their achievement. As expected students with positive learning attitudes will have positive learning habits and vice versa. Both of these factors will then have positive effects on their learning and then in turn on their achievement.

Amount of Time for Learning

As expected students who devote more time to learn achieve better than their peers who spend less time. However there has not been any study which examines what the ideal amount of time for the students to learn is.

C. Factors Related to School

1. Delivery Systems

Delivery systems of education discussed in this review mainly consist of traditional system of instruction and non-traditional system which focussed on the use of a modular system of instruction and programmed teaching. This modular system of instruction has been applied in three types of system of school - SD PAMONG, Small School, and PPSP. The results of the studies about the effectiveness of a modular system in these three school systems show contradictory results. At SD PAMONG, it is shown that a modular system is not superior to traditional system in terms of students' achievement. At PPSP school, a modular system is superior in some subject matters, while a traditional system is superior in some other subject matters. At small school a modular system is more effective than a traditional system.

The ineffectiveness of a modular system at SD PAMONG and PPSP school has different reasons. For instance, at SD PAMONG, one of the possible reasons is that the community members around SD PAMONG have low educational background. It means that they could not give much help to the PAMONG students. It must be noted that beside using a modular system, community members are supposed to become learning resources for the students. Beside that, another possible reason is that need for achievement of the PAMONG teachers is lower than other teachers in ordinary primary schools. The fact that the contradictory results at PPSP school is probably done to the quality of the modules being used varies from one subject matter to another and from one grade to another. Another possible reason is that the tests used the measure students' achievement in some studies mentioned above are not valid. Another reason that a modular system is not effective is probably because the system may not necessary be applicable for a certain school level done to maturity and readiness.

The effectiveness of a modular system at the Small School might be caused by the fact that at this type of school there are only a small number of students to be taught. Thus teachers have more time devoted to help students individually. Another reason could be that the quality of the modules used in Small School is better than that of the modules used in either SD PAMONG and PPSP School. This requires further investigation and analyses.

2. School and Class Size

In Indonesia, school and class size is usually related to school quality. Good schools in which there are better educational equipment and learning facilities,

and more educated teachers usually become favourite schools. Besides, it tend to have more able students with higher socio-economic background. Thus in Indonesia good schools usually have a large number of students in each class. it might be one of the reasons why there is usually a positive relationship between school and/or class size, and students' achievement. It is still doubtful whether the school and/or class size perse affects achievement.

3. School Shift

It is concluded from the research results that school shift has effects on students' achievement in which students from the morning shift school tend to achieve better than their peers from the afternoon shift. It seems that the reason for achievement differences is not the time shift itself - whether students learn in the morning or in the afternoon - but rather other factors which are related to these two different kinds of school.

School shift is closely related to other factors which determine students' achievement such as the quality of the students' the educational equipment and learning facilities, amount of time for learning, etc. For instance, the afternoon shift schools are usually private schools which do not have their own school buildings and equipment. They tend to have inadequate learning facilities. Their students consist of less able students - that is, they are enrolled in these schools because they usually could not be accepted in the morning shift schools. The afternoon schools also usually have smaller effective amount of schooling time. Actually all these factors which have affects on students' achievement - and not the time shift itself.

D. Educational Facilities and Instructional Materials

Educational facilities and instructional materials are important factors in the teaching learning process. The types and kinds of the facilities and materials vary from one subject matter to another.

1. Audio-Visual Aids

As shown in the review, the study concerning the use of audio visual aids in senior general secondary schools showed that the use of audio visual aids could help students understand the lessons better and could result in the improvement of students' achievement.

2. School Library

As shown in the review, the availability of school library could improve students' achievement. However, it must be noted that the availability of the school library alone is not enough, it must be accompanied with students' motivation to use the librabry and the kinds and quality of books available in the library.

3. Laboratory

The study on the importance of school laboratory in relation to students' achievement usually involves science and/or mathematics teaching. In general it is shown that the availability of school laboratory and laboratory equipment have positive effects on students' achievement. Students and teachers generally also do not deny the

usefulness of laboratory and laboratory equipment in improving achievement. Ironically, however, the laboratory and its equipment available at school are usually not optimally utilized by the teachers and students.

4. Educational Facilities

From the review it is concluded that educational facilities, however simple they are, could improve students' achievement. But there have not been any study which examines the effects of particular learning facilities towards certain subject matter to find out their effectiveness in improving students' achievement across a number of subject matters. Most studies only examine whether a group of students who use learning facilities achieve better than another group of students who do not. the finding is usually predictable - that is that the first group achieve better than the latter. It is imperative to find out, for instance, why students from urban areas tend to achieve better than their peers from rural areas. In this case, among other things, we have to find out the different effects of different qualities and/or the degrees of adequacies of learning equipment available at school in these two areas.

E. Family/Home Background of the Students

1. Parental SES

It is already wellknown, and as also shown in the research review, there is a positive relationship between parental socio-economic status (SES) and students' achievement. Parental SES is usually a proxy variable consisting of measures of variables such as parents' level

of education and income. It is as expected that parental SES will affect students' achievement because parents with higher education usually will provide better learning facilities at home as well as at school.

The study presented in the review, however, shows that there is no relationship between whether both parents work or only the father works, and students' achievement. In this example, it means that whether both parents work or not has nothing to do with both learning environment at home and the availability of learning facilities at home, and/or learning facilities provided for the students at school.

2. Learning Facilities at Home

It has been shown in the review and in many other studies that in general the avaibility of learning facilities at home mentioned above such as books, has significant positive effects on achievement. The avaibility of these facilities itself is not enough to have effects on achievement, but it must be accompanied by other factors such as students' learning attitudes and habits, and their amount of time to learn at home.

F. Social Enviroment

Social environment in which students live apart from the family or home environment, is theoritically to have effects on their learning, and thus their achievement. This is because it is assumed that they also learn in the society at large. Different kinds of social environment might provide different kinds of learning environment in which students learn in their everyday life.

1. Socio-Economic Status of the Community

From the review it is concluded that the SES of the community in which students live has effects on students' achievement. For instance, the ineffectiveness of a modular system at SD PAMONG, might be caused by the fact that the students lived in a community with low level of education. Therefore they could not give much help to them in their learning, while the sucsess of SD PAMONG, among other things, also depends on the educational assistance given to the students by the community.

2. Urban-Rural Difference

It has been shown in most studies that students from urban areas tend to achieve higher than their peers from rural areas. This is because in urban areas the situation is more conducive to learning than in rural areas. For instance there are more learning facilities in urban areas such as libraries, books, exposure to media etc. Beside that schools of better quality are usually located in urban areas.

3. Regional Differences

There is an indication that students from the regions in which Indonesian is spoken everyday achieve better than their peers from the regions in which local languages are used.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

From the above synthesis, we arrive to the following conclusions.

1. In general an instructional system by using modules is not effective in improving students' achievement, except in Small School in which a view students are taught at school. Factors which might cause this ineffectiveness are, for example: (1) the low level of education of the community which in theory should become the backbone of the PAMONG system; (2) the need for achievement among the teachers who are in charge of implementing the modular system is relatively lower than that of the teachers at regular schools; (3) qualities of the modules might vary and might be inadequate to be media for effective teaching; (4) the tests to measure students' achievement in these related studies might not be valid; (5) the maturity and readiness of the pupils.

2. The effects of new educational interventions on students' achievement vary. For instance "programmed teaching" is not effective in improving students' achievement. On the other hand, "reduced instructional time" in PPSP school is successful in improving students' achievement. That is, the PPSP school system is successful in reducing the number of school years from 6 to 5 years, while it still maintains students' achievement as the same level as in regular primary schools.

3. The utilization of instructional and other learning resources by the students and teachers improve students' achievement. this includes the utilization of very simple learning resources.

4. At schools in general, especially in rural areas, there is usually a lack of learning facilities. The facilities available usually are not adequate. At the schools in which some learning facilities are available, they have not been optimally utilized by students and teachers, although they understand their usefulness in improving students' achievement.

5. Most studies concerning the utilization of instructional materials and other learning resources usually involve Mathematics and/or Science.

6. Certain characteristics of the students affect students' achievement - these include both intellectual as well as non-intellectual variables. The intellectual variables which affect one's achievement include intelligence, arithmathic/quantitative ability, conceptional thinking ability; while the non-intellectual variables include positive attitudes towards certain subject matters, achievement motivation, learning participation, amount of time for learning, and speed and accuracy in learning.

7. Teacher-related factors which affect students' achievement include both technical and non-technical factors. The non-technical factors includes such variables as teachers' welfare, sex, and age, while the technical factor includes such variables as teaching experience, teachers' in-service training, teachers' educational background, and amount of time devoted for teaching.

The students come from the region in which Indonesia language is spoken everyday tend to perform better than those who are from the region in which local language is spoken everyday.

9. Family variables which have significant effects on students achievement include parental socio-economic status including parents' level of education and their income, and the availability of learning facilities at home. Whether both parents work or not does not have any effects on achievement.

10. Most studies concerning the determinants of effective schools put emphasis on the cognitive aspects only.

Recommendations

1. In regards to the ineffectiveness of a modular system as a method of instruction, it is imperative to examine the modules being used - including their contents, students' ability in understanding the modules, and the validity of the tests being used in the related studies. The main purpose of this efforts is to find out at what levels of schooling, and on what subject matters a modular system can be effectively used as a medium of instruction not only to improve students' achievement but also domains and what kinds of school settings and teachers are required to support the implementation of the system.

2. There should be modification in the educational interventions that are being used to accompany the implementation of the modules, so that they can be more effective in improving students' achievement.

3. it is important to find out accurately the effectiveness of the instructional materials and/or learning resources used by teachers and students in the teaching learning process. The study should compare the effectiveness of different types and qualities of learning resources, so that we can find out at what levels of schooling and for what subject matters certain types of learning resources can be used effectively to improve achievement.

4. It is important that certain prototypes of instructional materials be developed in teaching social studies.

5. The fact that the available learning facilities at school have not been optimally used by students and teachers, while in practice the utilization of these facilities could improve achievement, and that both teachers and students understand it; we need further research on the utilization of learning facilities available at school. we must find the reason why they are not optimally utilized in the teaching-learning process.

6. Considering that Indonesian language is used as a medium of instruction at school at all levels, it is necessary to conduct a study which can explicitly reveal the effects of students' competence on Indonesian language towards their achievement in a number of subject matters at the primary and secondary school levels.

7. In the implementation of new methods in the teaching learning process, it is necessary to find out the effectiveness and efficiency of the methods. This can be achieved by conducting a "cost benefit analysis" in order to be able to select and effective method of teaching with the lowest cost, and/or the most effective method of teaching with an avarage cost.

8. Previous research so far, especially on the determinants of effective school, has not adequately addressed to the problems on the effects of the social environment in general, and home environment in particular towards students' achievement. The problems related to this are non-technical, so in order to solve these problems we might use sociological and other relevant approaches.

9. Teachers' and students' motivation are the main components in the teaching learning process. But so far there has not been any clear findings as to what extent they really affect students achievement. The study of this kind might need a psychological and educational approaches.

10. Most studies in general, and especially on determinants of effective schools, usually put emphasis only on the cognitive aspects. To achieve the educational objectives, it is necessary to conduct research which put emphasis on the psychological and affective aspects.

11. More analysis are required on the relationship between students performance and the size of the school/classroom, and also between students' achievement with the types of training programmes taken by teachers' headmasters and supervisors.

12. More attention should be payed to the impact of style learning in different cultural settings in Indonesia towards students performance, cognitive, affective and psychomotor domains.

I

Title : The Effect of N-achievement and Intellectual Ability towards Scholastic Achievement of The Academic Stream of The Senior High School Students in South Sulawesi

Total number of pages : 358
Text number of pages : 314

Researcher : ABDULLAH, Ambo Enre

Type of document: Dissertation

Type of publication: Unpublished
Date : 1979
Place: Bandung

Host institution/Publisher : Faculty of Post Graduate IKIP Bandung
Funding source: personal

Keywords : motive for achievement, intelligence capacity, learning achievement, Senior high school, regions.

Summary

The main problem serving as the background of this research was the low learning achievement that still needs to be improved according to certain criteria. In the framework of finding solution to this problem, the following paradigms have been used: (1) the level of learning achievement indicates attainment of the instructional objective; (2) the effectiveness of a curricular activity will in the end be proved in terms of the level of student's mastery of the curricular objective; (3) learning achievement as one of the

cognitive variables is much more determined by factors other than the non-cognitive factors.

The hypotheses to be tested in this research are: (1) there is a similarity in the level of motive for achievement, level of intelligence, and level of learning achievement in Mathematics and Science of students of the science stream, both male and female students; (2) there is a similarity in the level of motive for achievement, level of intelligence, and level of learning achievement in Social Science of stu-dents of the social science stream, both male and female students; (3) there is a similarity in the level of achieve-ment mrtive, level of intelligence, and level of learning achievement in Language of students of the language stream, both male and female students; (4) there is a similarity in the level of achievement motive and level of intelligence between male students and female students as a whole; (5) there is similarity in the level of achievement motive, level of intelligence, and level of learning achievement in Mathematics and Science of both urban and rural students of the science stream; (6) there is a similarity in the level of achievement motive, level of intelligence, and level of learning achievement in social science stream; (7) there is a similarity in the level of achievement motive, level of intelligence, and level of learning achievement in language of students of the language stream in both the urban and rural areas; (8) there is a similarity in the level of achievement motive and level of intelligence of students in both the urban and rural areas as a whole.

The results of the study show among other things as follows : (1) Male students tend to have higher average scores in the learning achievement in Mathematics, Science, and Social Science, as well as higher intelligence capacity, except for the science and language streams, although it is not signifi-

cant at the significant degree of 5%; (2) Female students tend to make higher average scores in achievement motive and learning achievement in language, though not significant at the significant degree of 5%; (3) Urban students tend to have higher average scores in learning achievement in Mathematics, Science, Social Science, and Language, achievement motive in science stream, and intelligence capacity as a whole, all significant at the significant degree of 5%; (4) Rural students of the Social Science stream tend to have higher intelligence and achievement motive,though not significant at the significant degree of 5%; (5) As a whole, or regardless of the stream, the group with the higher intelligence tends to have higher achievement motive than the group with lower intelligence, and the other way round, the group with higher achievement tend to have higher intelligence capacity than the group with lower achievement motive, and the difference in average scores of the two groups is significant at the significant degree of 1%.

Methodology

The method used in this research was the descriptive-explanative method. The population subject of the research was Grade III students of Public SMA in South Sulawesi, and the sample consisted of 385 students or 8% of the population subject. The sample was taken proportionally and at random. The research data were collected from results of testing, whereas additional data were obtained from relevant documents and interviews with headmasters and or guidance counsellors in schools.

Findings, Conclusions, Recommendations

The conclusions drawn from the research are among other things as follows: (1) The effectiveness of attainment of the instructional objectives may be enhanced by providing curricular activities that are more relevant to the stated instructional objectives; (2) In each stream and as a whole, there is a significant effect of achievement motive on the intelligence capacity and of the intelligence capacity on the achievement motive; (3) there is a somewhat significant common impact of intelligence capacity and achievement motive on learning achievement in Mathematics, and a very significant impact on learning achievements in Science, Social Science, and Language; (4) increase in achievement motive tends to improve learning achievement for certain category of intelligence capacity, sucs as improvement of learning achievements in Mathematics, Science, and Language of students with lower intelligence, and improvement of learning achievements in Social Science of students with high, average, and low intelligence.

Written by: Rusliansyah Anwar Date: August 11, 1986

Revised by: Dr. Moegiadi Date: August 15, 1986

Title : Comparative Study on The Scolastics Achievement of The Third Graders of PPSP and The Fourth Graders of Regular Primary School

Total number of pages : 78

Text number of pages : 26

Researchers : Affandi, A.M., et.al.

Type of document : research

Type of publication : unpublished

Date : 1984

Place : jakarta

Host institution/Publisher :

Funding source : Development School Pilot Project

Keywords : Learning achievement, PPSP (Development School Pilot Project), primary school students, regular primary school students, regions.

Summary :

The background of the study was the fact that there were problems in the world of education in Indonesia concerning such as lowering of educational quality, irrelevancy between education and the demands of development, inefficiency and ineffectiveness of the implementation of educational system, and inadequacy of the seating capacity. Various innovative efforts towards educational reform had been conducted to

ercome and eliminate these problems, such as the introduction of an educational system model called the development chool Pilot Project (PPSP). PPSP was aimed at solving the educational problems faced in the world of education in Indonesia, particularly at primary and secondary levels. Its activities consist, among others of the following: (1) implementation of a teaching-learning strategy using learning modules and packages, based upon the principles of mastery learning and continous progress on class-based approach; (2) implementation of a 5-3-3 educational/school structure for primary, and secondary levels, consisting of 5 years of Primary School, 3 years of Junior High School, and 3 years of Senior High School. Therefore, the activities conducted at the PPSP were obviously different from those implementation in non-PPSP school. This difference was estimated to cause differences in students' learning outcomes.

This comparative study was aimed at knowing wheter there was a significant difference in learning achievement between students of PPSP Primary School and students of non-PPSP Primary Schools.

The study was based on the assumption that there would be a difference in learning achievement between students of PPSP Primary Schools and students of non-PPSP Primary Schools, due to differences in delivery methods of lessons, program structure, and the evaluation system.

The hypothese to be tasted in this study were as follows:

(1) The average learning achievements of students of PPSP Primary School are identical with that of students of non-PPSP Primary Schools

(H ------> M 1 = M 2);

o

(2) There is a significant difference in the average learning outcomes between students of PPSP Primary Schools and Students of non-PPSP Primary Schools

(H $_{p}$ ------> M 1 # M 2)

The sample of the study consists of 40 students of Grade 3 of PPSP Primary School of DKI Jakarta and a number of students of Grade 4 of non-PPSP Primary Schools in 5 Municipalities of DKI Jakarta, comprising 3 schools from each Municipality. All of the sample students were those enrolled in the 1984/1985 academic year. The subject areas observed in this research are Science, Social Sciences, Mathematics, and the Indonesian Language.

The results of data analysis using the t-test analysis show that the average learning achievement of PPSP Primary School students are significantly higher than those of non-PPSP school students.

In terms of individual subject areas, the average learning achievements of PPSP students in Science and Social Sciences are significantly much higher than those of non-PPSP students. However, for Mathematics, the students of non-PPSP schools made significantly higher average learning achievements than students of PPSP schools. As regards the Indonesian Language, the average learning achievements of PPSP students are insignificantly higher than those of the non-PPSP students.

On the whole, there is no significant difference in the average learning achievements between students of PPSP Primary School and students of non-PPSP Primary Schools.

Methodology

The study used a descriptive method. The instruments used in the study consist of a set of pre-designed tests, of which the materials were already adjusted to the levels of Grade 3 of PPSP Primary School and Grade 4 of conventional Primary Schools.

Findings, Conclusions, Recommendations

It is reported that there is no significant difference in average learning outcomes between students of PPSP Primary School and students of Primary Schools outside of PPSP.

One of the recommendations made on the basis of the PPSP Primary School students' learning achievements is that the length of the learning/school time at conventional Primary Schools can in fact be reduced as in PPSP Primary School, namely by means of improving the quality of the conventional Primary Schools. Improvement of quality may be done in the following manners: (1) promoting teachers' quality by way of in-service training, (2) increasing educational facilities for Primary Schools on equality basis, (3) implementing the PPSP teaching-learning strategy at other Primary Schools.

Written by : Rusliansyah Anwar Date : August 6, 1986
Revised by : Dr. Moegiadi Date : August 12, 1986

Title: Language Development Needs of Primary Schoo Children in Bilingual Environment (A Case in Ciledu Village, Cirebon District).

Total number of pages: 62
Text number of pages: 61

Researcher: ARIFIN, Elin Julaehliah

Type of document: Research report

Type of publication: Unpublished

Date: 1985
Place: Jakarta

Host institution/publisher: (no publisher)

Funding source: Government of Republic of Indonesia

Keywords: Primary school students, bilingual students, language programmes, regions.

Summary

The Indonesian Language (Bahasa Indonesia) is a national language used as medium of instruction in the teaching learning process in the schools, including the Primary Schools. It is assumed that students who have low language ability tends to have low achievement.

In bilingual areas the teaching-learning activities are often carried out by using 2 languages, namely the local and the Indonesia Language; a factor which consequently require the

students to master both languages. The mastery of the Indonesia lan e is imperative for the students in order to succed in their studies; on the other hand it is also necessary of being isolated from their community environment.

In Cirebon, the city where the study is carried out, various languages are spoken by the local community, namely: Sundanese, Javanese and Indonesia Language. Cirebon is a city situated between two Sundanese as their mother tongue) and Central Java (where the population speak their Javanese mother tongue). Anyway many of them will speak only Indonesian.

With regard to the afour-mentioned point, some questions are raised such as : 1) will the use of two languages by Primary School students hamper their educational development ?; 2) is the local language more important for the development of Primary school students than the Indonesia ?; 3) whether the decision to use the Indonesia Language as medium of instruction starting from Grade IV is considered the correct thing to do; 4) whether the use of Indonesian language since grade I of the Primary School gives positive influencce to students achivement; 5) which is more advantageous for students of the urban areas: to master their local language better or other subjects?; 6) in what grade of Primary School does the Indonesian bring more effective result than local language in terms of the students expressing their feeling and ideas?

The purpose of the study is to obtain information on the needs of languages (local and Indonesian Languages) of the Primary School students of various ages living in the bilingual or multilingual areas.

The purpose of the study is to obtain information on the need of languages (Local and Indonesian Languages) by the Primary

chool Students of bilingual or multilingual environments, as t is expected to become a point of consideration for the overnment's policy background on Primary School Education.

Methodology

The researcher has chosen a location for this first phase of study where the population speak more than one language, namely Cirebon municipality. The languages spoken by the people are Sundanese (local), Javanese (local language) and the Indonesia language.

The subjects involved in this study are Primary School students, parents and teachers. From the students, the Grade I, Grade IV and grade VI are taken as sample under the following reasons: the Grade I are school beginners; the Grade IV students are starting to use the Indonesia language in classroom activities; and grade VI are students completing their Primary School Education.

The data collection in carried out by first taking ten students comprising grade I, grade IV and grade V (five boys and 5 girls) who are chosen at random. Their daily activities are observed, their achievement are studied, and interview was conducted with their parents and teachers.

The observation method is used to observe students' use of languages when they are playing, studying and doing home activities; while the interview is used to obtain information on students daily activities from their respective parents and teachers.

The qualitative data were processed to obtain complete information on students language activity.

Findings, Gonclusions, and Recommendations

1. Findings:

The outcome of this first phase of study shows that in the research location, the Sundanese and Javanese local languages are used by the natives in daily communication languages, where as the Indonesia language is used by the Indonesian Citizen of foreign origin. This pattern of the language usage has influenced the local students.
The findings also indicate that the primary school students in general do not find serious problem in using the Bahasa Indonesia. Most of them have spoken the language when they were at the 1st grade of the Primary School or at Kindergarten.

On the contrary, the grade I, grade II and grade III students often find it difficult to understand the lessons explained by the teachers, so that the teachers often have to use the local language (Javaneses or Sundanese) to help them understand the lessons. As for grade IV, grade V and grade VI, the students do not find any problems with the Indonesia language (Bahasa Indonesia) used as a medium of instruction during teaching-learning activities.

In their daily communication activities, there is evident that children with Sundanese mother tongue tends to speak Sundanese, while those with Javanese mother tongue will speak Javanese. Although the students tend to speak their respective local languages, it does not hamper the communication among each other. The only problem is that Javanese mother tongue can not understand the Sundanese children and vice versa.

The Sundanese parents, who believe that the mastery of good Sundanese language will reflects the high social status of the speaker, suggest that this local language be taught at school. But the teacher think it won't be easy to do since none of the teachers had taken Sundanese language study; and the most important thing is that this local language will not influence students achievement in the final examination.

2. Conclusions:

a. The use of 2 or 3 languages in the research location does not hamper the development of the Primary school children; as proved by students achievement

b. Local languages (Sundanese, Javanese) are not considered more important than the Indonesia Language

c. The decision to start using the Indonesia Language at the fourth grade of the primary school is not relevant to students need of language because most of them are able to speak Indonesia at grade I

d. The grade VI students can use the Indonesian language fluently and accurately to express what they have in minds.

e. The Sundanese and Javanese parents wish that local languages be taught at school as they are of the opinion that local languages reflect virtue and politeness. It contains more aspects such as manners, good speech and local tradition and culture.

3. Recommendations:

a. It is recommended to improve the teaching of local language (Sundanese) with the aim to develop local tradition and culture. Furthermore the teaching of local language will support the development of many educational elements such as manner, moral, custom and tradition, virtue and politeness and local culture. This is of the most importance, since a school is expected not only to produce man of knowledge and skills, but also to develop good personality.

b. It is also suggested that the Primary school students of the bilingual environment be tought Bahasa Indonesia starting from grade I, and local languages be included in the curriculum as subjects to be taught starting from grade III.

c. Accordingly it is necessary to prepare local language teachers through pre-service and in service training programme.

Written by: Bambang Indriyanto — Date : August 7, 1986
Revised by: Dr. Moegiadi — Date : August 12, 1986

4. Title : Achievement of the third graders of lower Secondary School and family Education in Families Working Parents and Working Fathers Only in Banda Aceh District).

Total number of pages : 56
Text number of pages : 74

Researcher : ATIKAH, Eutik

Type of document : Research report

Type of publication : Published

Date : 1983
Place : Jakarta

Host Institution/Publisher : Ministry of Education and Cultural Research and Development.

Funding Source : Office of Educational and Cultural Research and Development, MOEC

Keywords : educatonal intensity, achievement, parents, students of secondary education

Summary

The document was a research report submitted as a part of the requirement of the Educational Evaluating Training carried out by the Office of Educational and Cultural Research and Development in 1982/83. The main objective of the study was to find out the relationship between academic achievement of the second grade students of SMP and educational intensity occuring at home among those coming from the families in which both their parents worked as compared to those coming families in which only their father worked. The study was some kind of a survey - type research classified as a "causal comparative study".

The data on achievement were collected from the students' scores in the school reports through a documentary study, while the other data concerning other variables were mainly collected from the students as the respondents through questionnaires. To answer the research question the data were analyzed with bivariate statistical methods. The results of the study showed that was no difference in achievement and educational intensity in the home of the students between the families in which both their parents worked and those in which only their father worked. The study also showed that there was no relationship between students' achievement and educational intensity occured at their homes. From those results, the researcher arrived to the conclusion that academic achievement of the second grade students of SMP in Banda Aceh, was not determined either by educational intensity occuring at home, nor by whether both their parents worked or only their further worked. She then suggested that further similar studies should be carried out by including other variables related to educational process in the home which might have relationships with students' achievement.

Methodology

The population of the study was the second grade students of SMP Negeri (Public Junior Secondary School) whose both parents were working and the students whose father was working but their mother did not. Two groups of students - one who had working parents and the others who had a working father - were sampled from the population. Each group consisted of 64 students. To draw this sample, the researcher used a stratified sampling procedure - first she took the schools, and then the student. The researcher used some kind of comparative-causal research which belongs to "Ex Post Facto" research.

The data on the independent variable (educational instensity) were collected from the parents through questionaires, while the data on the dependent variable (students' acheivement) were collected from their scores based on the school reports.

The statistical techniques used for data analisys were frequency distribution, T-test and Anova. The results from these analyses were described and discussed in the report.

Findings, Conclussion and Recommendations

The study produced the following main results:

) There was no difference in educational instensity between the family in which both the mother and father were working, and those in which only the father was working.

2) There was no difference in academic achievement between the students from the families in which both parents were working and those from the families in which only the father was working.

3) There was no significant relationship between students' achievement and educational intensity occured at home.

4) There was no significant relationship between educational intensity and mother's level of occupations.

From those findings researcher conclude that academic achievement of the second grade student of SMP in Banda Aceh was not determined by the educational intensity given by their parents, nor by whether their both parents working or only the father working.

Written by: Dr. Jiyono Date: August 7, 1986
Revised by: Dr. Moegiadi Date: August 14, 1986

Title : Summary Report of The Evaluation of The Development School Project

Total number of pages: 21
Text number of pages: 21

Researchers: A team from the Centre for Curriculum and Educational Facilities Development

Type of document: Evaluation

Type of Publication: Unpublished

Date : 1981
Place: Jakarta

Host institution: Centre for the Curriculum and Educational Facilities Development

Funding source: Government of Republic of Indonesia

Keywords: Summative evaluation, educational innovation, achievement.

Summary

The development school Pilot Project (PPSP) is a new system of education aimed at developing a Primary and Secondary Education System which contains the following qualifications:

a. It is effective and relevant to the individual as well as societal needs
b. It is a strong foundation of lifelong education
c. It is efficient, realistic and relevant to the available resource

As a new system, the PPSP system contains the following elements:

a. The broad outline of PPSP education program
b. The modular system
c. The mastery learning system
d. The continuous progress system
e. The cluster system
f. The evaluation and guidance and counceling system
g. New level of education, namely: 5, 3, 3 meaning 5 years for primary, 3 years for junior secondary and 3 years for senior secondary level.
h. Management system
i. The terminal skill education

Those elements of the PPSP system have been tried out since the year 1975 upon which formative evaluation have been conducted with the purpose to find information on:

a) The quality/effectiveness, relevancy and efficiency of the system in the course of reaching the expected objectives/ targets.
b) Students achievement
c) The cost/financial implication of the system

Methodology

This system have been tried out at 8 Teacher Training Colleges (IKIP) throughout Indonesia, namely: IKIP Jakarta, Bandung, Semarang, Yogyakarta, Surabaya, Malang, Padang and Ujung Pandang. Evaluation was also conducted in those project location, using ordinary Public Schools as control groups. The control group were selected among schools which met the qualification requirement such as: excellent, equivalent and

average; while the sample is determined through random sampling. As the PPSP system has established 8 schools, each of which consisting of levels of education similar to that of the Primary School (SD), Junior High School (SMP) and Senior High School (SMA), accordingly the selected control groups were: 24 Primary schools (SD), 24 Junior High schools (SMP) and 25 Senior High schools (SMA).

The groups to be compared were between:

a. Grade 5 of PPSP and grade 6 of Primary schools (SD)
b. Grade 8 of PPSP and grade 3 of SMP
c. Grade 11 of PPSP and grade 3 of SMA

The pilot project used qualitative approach/judgement to evaluate the result of project implementation, and quantitative approach/measurement to evaluate students achievement compared with that of the ordinary schools.

The instruments used by the project were:

a. The achievement tests on various subjects namely : science, mathematics, social science, Pancasila moral education, Indonesia language and English language.

b. The attitude scale covering 15 aspects such as: Nationalism, responsibility, toleration etc.

c. The cognitive ability test, which was adapted from the cognitive ability test

d. Questionaire (to students, teachers and school principals) as weel as classroom observation during the teaching learning activities.

e quantitative analyses was conducted using Anova and ltiple regression with both the PPSP program and the 1975 rriculum as independent variable, and students chievement/attitude scores as dependent variable.

Findings, Conclusion and Recommendation

a. Findings

The findings showed that the majority of the PPSP elements could develop students achievement. There was no gap between the bright and the slow students, and the using of modules would not in anyway hamper the bright students to continue their learning process. It was assumed that the bright students are faster than expected in mastering the module. But the findings also revealed that there were many PPSP elements which needed modification, such as the inadequate quality of the modules, the weaknesses of the one-roof management system and the implementation of new structure: 5-3-3 levels of education which seemed to be more effective for the urban rather than rural schools.

The comparative analyses between the PPSP and the ordinary school students achievement in certain subjects, the finding showed that the PPSP students achievement were higher in science, Indonesia language, Pancasila Moral Education, whereas the ordinary school students were better in Mathematics and Social Science.

b. Conslusions

1) As a new model, the nation-wide implementation of the PPSP system is far too early

2) Although some components of the systems are considered effective, but there are also components which must be reconsidered (whether the components must be eliminated or retained for the PPSP use only).

3) To put the PPSP components into successful category and unsuccesful category further studies must be undertaken by considering the following points:

- some contribution to the solution of present education problems

- the relevancy of the PPSP system to the government educational policy and regulations in a bid to avoid the risk of causing imbalances to the present education system

- the feasibility of the system in view of its situation and condition in the field.

Recommendations

1) It is about time to plan for the implementation of a new 3 levels of education: 5-3-3 to replace the present formal structure of 6-3-3, by means of reviewing the 1975 curriculum program and taking into account the broad outline of the PPSP program.

2) Efforts must be undertaken to implement the mastery learning system at ordinary schools, by developing its components such as criterion reference.

3) It is also recommended to in a small scale a "continuous progress" learning program at the 5-3-3 as well as 6-3-3 levels of education

4) It is necessary to develop the quality of the modular system relevant to students cognitive development.

ritten by: Bambang Indriyanto Date : August 7, 1986

vised by: Dr. Moegiadi Date : August 12, 1986

tle : Personality Traits of The Teacher Training School Students Related to Their attitude towards Teaching Professional

otal number of pages : 180
ext number of pages : 154

esearcher : Dahlan, M.D.

ype of document : Dissertation

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Date : 1982
Place : Bandung

ost institution/publisher : Faculty Post Garduate of IKIP Bandung

unding source : Personal

eywords : personality traits, teacher-training school, attitudes, teaching profession

ummary

his study designed to see the type of personality traits of acher Training School (SPG) students of West Java Province relation to their attitudes towards teaching profession. ariables to be studied in relation to the personality traits SPG's students included: sense of achievement, working rderly, cooperativeness, participation, independency (autonocus), responsiveness and endurance work. The seven traits nder study was very significantly determine the student attitude towards the teaching job.

The results of the study indicated that for SPG's students of West Java Province there were levels of intensity of attitudes in relation to those personality traits, included: (1) high intensity in relation to working orderly, working cooperatively with other people (called as affiliation), and participating in the activities involving also different sexes; (2) moderate intensity in relation to working seriously for personal achivement (sense of achivement), making their own desicion autonomously (independency), and responsiveness to change and reform; (3) very low intensity in relation to working with great endurance.

The coefficient of multiple regression was computed from the student personality traits and their attitude towards the teaching job. The results indicated a negative tendency of prediction, which means that if there is an increase in the total personality traits of the students, their attitude towards the taching job will decrease.

Methodology

The study was done in the West Java Province covering the last grade (grade 3) students of the Teacher Training School. There are altogether 27 SPGs in the West Java Province treated as population of the study. The total number of the 3rd grade students of those schools were 3964, including male and female (statistical data 1980).

Among those 3694 students, a sample of 441 students was drawn for the purpose of the study. This sample consisted of three group according to the stream of the study in SPG, included: (1) stream of social science of 225 students, male and female;

(2) stream of Math and Science of 130 students; and (3) stream language and health of 36 students, both are male and female.

The study was carried out using descriptive analytical design to see the status of the arts of the third grade students of SPG concerning with their attitude towards the teaching profession, which they were supposed to be working in soon. As an instrument for the purpose of data collection Personality Traits Inventory of Edward Personal Preference Schedule (EPPS) was used. Another instrument, attitude scale was specially designed to test the students' attitude towards teaching profession for primary school.

Findings

The results of the study indicated that:

a. SPG's students of West Java Province had shown a positive attitude towards teaching profession for primary school;

b. Among the seven personality traits there were high correlation one to the other with coefficient R= .7048;

c. There was also high correlation between personality traits of the students and their attitude towards future teaching profession.

Recommendation

a. to further identify what other factors would likely give positive influence on the development of teacher attitude towards the teaching profession;

to identify other personality traits would likely give possitive influence on the development of teacher attitude towards the teaching profession;

to identify some alternative of model development of students attitude towards the teaching profession for primary school.

Written by : Dr. soemardi. Hs. Date : August 4, 1986

Revised by : Dr. Moegiadi Date : August 11, 1986

Title : The Impact of The Study Habit, Attitude, Intelectual ability Processes on The Performance of The Senior High School in Mathematics in Ujung Pandang

Total number of pages : 498
Text number of pages : 236

Researcher : Djaali

Type of document : Dissertation

Type of publication : Unpublished

Date : 1984
Place : Jakarta

Host institution/publisher : Faculty of post graduate of IKIP Jakarta
Funding resource: Personal

Summary

The sudy was correlational ex-post facto, and focusing on the influence of habit, attitude and aptitude on Mathematics achievement of the SMA students. The study was to test whether Mathematics achievement of the students was significantly affected by the six indpendent variables under study. These variables were: (1) the students' attitude towards Mathematics' (2) the amount of time spent for studying Mathematics; (3) the student's quality of learning; (4) the student's capabilities on arithmatics; (5) the student's capability on abstract thinking; and (6) the accuracy of work of the student.

results of the study were as the following :

a. in general, the most influencial factor on Mathematics achivement of the students exact science stream was the quality of learning, while other factors were also influencial in lesser degrees, consequtively those were: arithmatics capabilities, capabilities on abstract thinking, the amount of time spent in studying Mathematics, and the speed and accuracy of work;

b. in general, the most influencial factor on Mathematics achievement of the students from social science strem was the amount of time spent for studying Mathematics, while other factors were also influencial in lesser degrees, respectively those were : quality of learning, the attitude towards Mathematics, capabilities of doing arithmatics works, and speed and accuracy of works;

c. both exact and social science as well the teacher's capabilities would influence students's achievement significantly.

Methodology

The study was carried out in Ujung Pandang, the capital of the South sulawesi Province. The population of this study was the secimg grade oh the Senior High School (SMA) students in the municipality of Ujung Pandang. The study was done in 1983 - 1984. The sample was drawn from the population by using stratified proportional random sampling. Scores on the dependent and independent variables were collected using ten sets of instruments.

thods applied in the statistical analyses were analysis of cremination, Hoyt's reliability, Ebel's obesrver -greement efficient realiability and correlation. For the hypotheses sting the anlyses of covariance and multiple regression were plied.

ndings

me conclusions drawn from the study were the following :

a. there was an indication that the speed of clerical works would give negative influence on the Mathematics achievement of the students. This preliminary conclusion is subject to be further researched.

b. factors such as attitude, amount of time and aptitude of the students gave positive and significant influence on achievement of Mathematics study;

c. the teacher's factors were influencing siginficantly the achivement of the students in studying Mathematics, regadless the streams of the study (science as well as social science);

d. school climate and learning climate were also significantly influencing the Mathematics achievement of the student, regadless the stream of the study, science and social science.

Written by : Dr. Soemardi. Hs Date : August 4, 1986

Revised by : Dr. Moegiadi Date : August 11, 1986

Title : Research report:an Experiment on The Impact of Visual Aids in Learning-Teaching Process

Total number of pages : 122

Text number of pages : 38

Researcher : Hamid, M. Akib

Type of document : Research report

Type of publication : Published

Date : 1986

Place : Bandung

Host Institution/publisher : IKIP (Teachers' Training College) Bandung

Funding resource : Goverment of Indonesia

Keywords : visual-aids, Mathematic, sicence, experimentation, learning-teaching process.

Summary

This document is a report on the outcomes of an experiment research on teaching. The purpose of the study was to find out the effect of teaching of Mathematic and Science in grade 5 by using visual-aids against the same teaching method without visual-aids. Twc groups of grade 5 students from two parallel calsses of the same primary school in Kabupaten Bandung were compared on their learning outcomes after being treated differently for about 12 times of teaching. The results showed the that the group of students taught with visual-aids had

nificantly better learning outcomes. It was then suggested t using visual-aids in teaching should be encouraged. Fur- r research was suggested on using visual-aids involving der scope in terms of samples as well as subject matters.

thodology

he population of the study was the fith grade students in bupaten (district) Bandung in 1984/1985. The study was an xperimental research in which two groups of the fith grade tudent -each of which consisting of 22 students- were eceiving different treatment. One group as an experimental roup were taught Mathematic and Science by using visual- ids, while the other as control group were taught without sing visual-aids. These two group were taken from the two arallel fith grade clasess from the same school. After the reatment for about 4 months (12 periods of teaching) the two roups were measured on there achivement on Mathematic and cience using achivement tests and rating scales. The data ere analyzed by using Anova and T-test to test the hypo- heses.

he steps of the study were as follows:

a. the development of instrument to measure the learning outcomes;

b. the preparation and sampling procedures to get the experimental and control group;

c. the treatment;

d. testing the hypotheses whether there were significant differences on students' learning outcomes (achivement between the two groups of students).

ndings, Conclusioos and Recommendation

was found that the students taught with visual-aids had gnificantly higher gain scores on Mathematic and Science

application or transfer of learning;

confidence on problem solving;

achievement; and

d. learning outcomes (as average scores of the above 3 items).

It was thus concluded that teaching Mathematic and Science by using visual-aids had better results on students; learning outcomes than teaching without visual-aids.

From the findings and conclusin above it was suggested that teachers should use visual-aids in their teaching. The researcher also suggested the following further studies:

a. a similar study using a larger sample size and including more subject matters;

b. a study to find out what kinds of visual-aids which are more effective to increase students' learning outcomes;

c. a study to find out untul what age groups the visual-aids can be used effectively in teaching.

Written by : Dr. Jiyono — Date : August 9, 1986

Revised by : Dr. Moegiadi — Date : August 15, 1986

Title : The Effect of Discussion, Lecture and Project Methods toward the Achievements of the Senior High School Students in History

Total number of pages: 256
Text number of pages : 225

Researcher : HARAHAP, Amir

Type of document: Dissertation

Type of Publication : Unpublished

Date : 1982
Place: Jakarta

Host institution/Publisher: Faculty of Post Graduate IKIP (Teacher Training College) Jakarta

Funding source: Personal

Keywords: discussion method, lecture method, learning achievement, history, senior high school students.

Summary

This research was conducted in the framework of getting inputs for improvement of educational quality. It was meant to answer three basic questions as follows:

a) How far do the teaching-learning methods, inparticular the discussion method, lecture method, and project method, affect students' learning achievements in history.

b) Which method is the most effective for teaching History.

c) Which method is the most effective for teaching abstract knowledge, factual knowledge, and application ability.

The research was carried out experimentally, using the discussion, lecture and project methods as the treatments. The experimentation was done in 9 public SMA's, divided as follows: experiment of lecture method in SMA 14,32 and 40; experiment of discussion method in SMA 2,15 and 35; and experiment of project method in SMA 5, 25, and 41. The experiments were conducted by selected teachers who had been given directives and other necessary guidelines consisting of such as the objectives, the material, the teaching-learning activities to be conducted, teaching equipment, and evaluation.

Methodology

The sample unit materials to be treated in this research were selected at random, and so were selection of classes and public SMAs involved in the experimentation, and assignment of teachers as to the teaching-learning methods to be used. The number of sample students was 315.

The research instruments consist of questions about Indonesian History pertaining to abstract knowledge, factual knowledge, and application ability. The instruments had been tried out through a presurvey.

alysis of data was done by means of the Anacova analysis nd comparative checking using the NEWMANKEULS method, which d been preceded by normalities. bisides, the t-test and the -test were also done. The significance degree used in data nalysis was 0.05 or 0.01.

Findings, Conclusions, Recommendations

The results of the research indicate that the discussion method, the lecture method, and the project method have a significant impact on students' learning achievements in Indonesian History. For teaching historical knowledge, the discussion method in general is more effective than the lecture method, although the difference is not so significant. In this connection, the discussion method and the lecture method are more effective than the project method. For teaching abstract knowledge, the discussion method is the most effective. The lecture method is the most effective for teaching factual knowledge. The project method is the most effective for teaching application ability. Regression of the final result against the initial result is significant.

Some other significant factors include such as student group, student's background, school environment, parents' background, teacher, and teaching-learning materials.

Integration of abstract knowledge, factual knowledge, and application ability was obvious at the beginning, which means that after the treatment of a specified means that after the treatment of a specified method the students were able to differentiate between abstract knowledge, factual knowledge, and application ability.

The recommendations based on the research outcomes are concerned with two aspects, i.e. research development and practical development. For the development of the three teaching - learning methods, further research should be conducted to cover a wider scope in order to get more information about the strengths of each method.

Based on this research, there are still a lot of questions to be asked, particularly concerning the impact of various variables that have not been analysed and controlled such as teacher's background or variation, the school, environment, TV, and newspapers. The other aspects besides abstract knowledge, factual knowledge, and application ability such as understanding, synthesis, analysis, and evaluation, should also be included in further research to find out their effect and suitability to the methods used. As this research was limited to the areas within the Jakarta Special Territory, its conclusions might not be valid for the whole country.

Therefore, it is recommended that the same procedure, design, and instruments be used in the other regions so that it is possible for the research to yield generalizations for the whole areas of Indonesia.

For practical development, it is recommended that candidates of SMA teachers who are in practice being trained at IKIPs be given special competence in teaching methods, through proper nurturance in teaching practice. In the framework of increasing the effectiveness of teaching methods, it is necessary that SMA tachers, particularly history teachers be given in-service training, so that the educational and instructional objectives may successfully be attained. Teacher's books as well as students' books should be improved to cover the knowledge and abilities required by the

icula. Teaching-learning equipment and other facilities, as desks, blackboards, tables, classroom size, and books uld also be adapted to the various teaching methods that teachers may use.

tten by: J. Tukidja Date: August 6, 1986

ised by: Dr. Moegiadi Date: August 10, 1986

Title : The Planning, Sampling, and Some Prelimanary Results of The Indonesians Repeat 9th Grade Survey

Total number of pages : 30
Text number of pages : 30

Researchers : Jiyono and Suryadi, Ace

Type of document : research report, appearing in Evaluation in Education, vol 6, pp 5 - 33.

Type of publication : Published

Date : 1982
Place : Greate Britain

Host institution/publisher : Pergamon Press

Funding resource : Goverment of Indonesia

Keywords : sampling, curriculum, achievement, survey

Summary

The document is a prelimanary report of a survey type research concerning grade 9 students in Indonesia. The three main objectives of the study were describe the achievement of grade 9 students in 6 main subjects; to identify the relative importance of the independent variables associated with achievement; to compare achivement in 1981 with achivement of the students of the same in 1976. The study was a replication of the study carried out in 1976, with improvement in a sampling design. The results of the study showed that achievement in Indonesian language (Bahasa Indonesia) in 1981 was

ghtly better than that in 1976, while the achivement in glish remained the same. The increase in student enrollment d not have any effect on achivement. The students from ban areas performed better than the students from rural eas. A relatively small proportion of the variance of chivement was explained by the independent variables in the tudy. Among those variables, variables concering teaching-earning process showed the most significant contribution in xplaining the achivement variance. The sampling design used n the study was much better than that in any other similar tudies done in Indonesia before. Therefore later similar tudies should adopt this sampling design.

Methodology

The desired target population of the study was all the grade 9 students in Indonesia in 1981, while the defined target population was those students in 20 provinces in the country. The students in the rest 7 provinces which consisted only a very small proportion of the total population were excluded from the study due to difficult acces.

The study was of a survey type study in which nearly 4000 grade 9 stduents were sampled randomly using a three-stage-complex design. The data were collected from the respondents who consisted of grade 9 students, their respective teachers and school principal, by using quesstionaires and achievement tests. The statistical techinques used ranged from simple ones such as frequency distribution or precentage, to sophis-ticated ones such as multiple regression. The sopisticated sampling formulas sampling were employed in drawing the sam-ple and calculating the results.

ndings, Conclusions and Recommendations

ne main results of the study were:

a. in comparing the students' achivement in 1976 and 1981 there was a slight increase in the achievement of Indonesian language but not in the achievement of English;

b. there was no significant relationship between students' enrolment and their achievement;

c. students from urban areas tended to perform better than those from rural areas.

d. only 26% of the variance of the achievement of Indonesian language was explained by the independent variables associated with it. Social economiic status (SES) variables only explain about 5% of the variance. After holding the influence of SES constant only the teaching-learning process variables which showed the most significant contribution in explaining the achivement variance (+ 8.5%).

No further conclusions or recommendation were generated from above findings in the report yet. However it was recommended that other similar studies should uses the sampling strategy as used in the study, since it was shown that by using a smaller sample size, the study still yield more accurate estimates of the population parameters, compared to the former study in 1976.

Written by : Dr. Jiyono Date : August 5, 1986

Revised by : Dr. Moegiadi Date : August 11, 1986

e : Research Report: The Relationship between Primary School student's Performance in The Secondary School and Community in Besito Village

l number of pages : 51
number of pages : 42

earchers : Kasmadi, Hartono; Dewanto, Ph.; Supardi; Siregar, LF; and Retmono

pe of document: Research report

ype of publication : Published

ate : 1980
lace : Semarang

st Institution/publisher : IKIP (Teachers Training College) Semarang

unding source : IKIP (Teacher Training College) Semarang

eywords : primary school, community, secondary school

ummary

The document is a report of a second study on the results of the experimental five year primary school in cantral Java called "SD V tahun Besito". The main objective of the study was to find out the effevtiveness of the school system of the five year development primary school in the context of ordinary six year primary schools which were in existant. The development school had some advantageous characteristics over the ordinary ones, such as adopting mastery learning, continuous program, and remedial and enrichment program, etc.

is was a second part of the study. The first study showed at there was a significants difference in their academic hievement between the secondary school students (SMP) from e five year primary school and their peers from the ordina- six year primary school. This study was a follow up of the rst study - aimed to find out more about the opinions and periences as of more people the effectiveness of the year velopment school. This respondents included in the study consisted of not only the students from the development chool project (PPSP) and from ordinary school who continued their study in the secondary school, but also consisted of their parents, teahers in primary schools as well as seconda- ry schools, and the community leaders who were familiar with the development school.

The study was a kind of survey-type research in which a causal comperative design was used. The most important finding from this study was that the most of different group respondents thougt that five year of primary schooling were adequate to educate pupils to master the educational objectives set out by the curriculum of the ordinary six year primary schools. It was suggested by the researchers taht five year primary school system implemented to some other selected areas, by considering factors such as the readiness of the school personel, facilities and curriculum.

Methodology

The population of the study was all the students ever enrolled in the five year development primary school in the village of Besito in Central Java Province, from 1974 to 1978/79 -which consisted of 150 students. 46 of who had worked in the community, while 55 of who were still studying in Junior Secondary school (SMP) and the rest were studying in Senior Seondary School (SMA).

As mentioned before that study attempted to find out further about the effectiveness of the five year primary school system in the context of the six year ordinary primary school. To do this, the researchers employed some kind of a causal comparative design. The data were gathered from several groups of respondents consisting of the students of the development school who were studying in SMP and who worked in the community (60% of the population were studied); their parents (15 persons); teachers of the development primary school (6 persons); and their peers from the ordinary schools (10 persons); their teachers in SMP (9 persons); and some community leaders (15 pesons). The data from those respondents were collected through interviews, observation and documentary study. Most of the data were analyzed using univariate statistical methods, such as percentages, frequencies, and using a bivariate technique - t tes

Findings, Conclusions and Recomendations

The most important findings of the study were the followings:

1) The fact that there was no difference in achievement between the SMP students from the development school and those from the ordinary schools might be caused by the fact that those from the development school came from the families with higher socio-economic background.

2) The students from both the development and ordinary schools had similar levels of attitudes.

3) Students from both the schools had encountered the same problems concerning certain subject matters.

Most people from different groups of respondents thought that the five years of development school were adequate to educate pupils to meet the educational objectives set out by the ordinary primary schools.

From the results above, it was suggested that the five year development school system could be disseminated to some other selected areas by considering factors such as the readiness of the school personnel, facilities and curriculum.

Written by : Dr. Jiyono Date : August 9, 1986

Revised by : Dr. Moegiadi Date : August 15, 1986

Title : Research report : The Use of Educational Media in The Lower Secondary School in Bandung

Total number of pages : 66
Text number of pages : 58

Researchers : Koko, D.A. and Zahir, S.

Type of document : Research report

Type of document : Unpublished

Date : 1986
Place : Bandung

Host institution/publisher : Research Institute of IKIP (Teacher Training College) Bandung

Funding source : Goverment of Indonesia

Keywords : educational media, learning-teaching process, communication, effective learning

Summary

Educational media is one integrated part of the learning-teaching process in the classroom. It is one type of communication between teacher and on the one side, and student on the other. The function of using educational media in the

aching-learning process, among others, are (1) to help udents make the concrete experience abstract to be more sily digested by inquiring mind; (2) to draw the attention re to learning on the part of the student; (3) to help tudents to develop their self activity; (4) to make the esults of learning to be retained longer,; and (5) to increase the vocabulary of knowledge on the part of the students.

The study was designed to see how far were the educational media used in school and how effective they were, in term of producing the desired learning outcomes. Ingeneral, the results of the study indicated that:

a. the majority of Junior Hig School were not using educational media frequntly in school when they were involved in the teaching-learning process;

b. most of the teachers were more likely to use the educational media in the classroom rather than in laboratory;

c. most of the teachers thought that educational media were quite effective to use, in term of increasing the learning motive of the students;

d. most of the tearhers tought that educational media could make the students more attracted to learning.

Methodology

This study was carried out using the discritive model of research. This was not survey of research in the sense that the conclusions which might be drawn from this study were not supposed to be generalizable for nation wide population. The

location of the study was also limited with in the boundary of Bandung Minicipality in the West Java Province. Junior High School within this boundary was treated as the sample frame of study included 254 teachers, 105 were male.

In this study data were collected using both questionaires and interview schedules. These two methods of data collection were used as complementary one to the other, and for the purpose of computation Chi square model of data analysis was used.

Findings

Conclusions were drawn as results of this study. Some of those were as the following:

a. locality preference and the degree of effectiveness in using educational media differ acording to sex of the teachers;

b. also concept development and feasible planning application would differ according to experience of the teachers;

c. concept development and feasible planning application would also differ according to the educational attainment of the teachers;

d. in general, educational media were not so frequently used in schools;

e. in most cases educational media were used for the purpose of increasing learning motivation;

one of the important effects of the finding would be that in-service training for the teechers was primary important to increase the effectiveness of using educational media in schools.

ritten by : Dr. Soemardi. Hs. Date : August 5, 1986

evised by : Dr. Moegiadi Date : August 13, 1986

Title : Indonesian Primary Schools: An In-depth Study

Total number of pages : 72
Text number of pages : 42

Researchers : MANGINDAAN, Christina, et.al.

Type of document : Research

Type of publication : Unpublished

Date : 1979
Place : Jakarta

Host Institution : Office of Educational and Cultural Research and Development

Funding sources : Government of Indonesia

Keywords : Primary school, Indonesia, educational facility, survey, achivement

Summary

The objective of the study is to find out what happens in primary schools, not by the more conventional survey techniques using questionnaires, sampling and statistics to tease out the thruth, but by spending a lot of time in two or three schools. It is mainly concerned with such matters as the internal organization of the school (e.g. timetable, whether or not there are specialist teachers); the curriculum (e.g. the teaching of the various subjects); pedagogical techniques and teaching styles (e.g. interaction between teachers and pupils; questioning, use of equipment); the nature, condition

use of facilities (e.g. buildings furniture, textbooks, arts, apparatus); teacher preparation (e.g. the making of atuan pelajaran" or other lesson summaries); classroom imate (e.g. discipline, children's behaviours); the social- ation process and the hidden curriculum. It cannot be laimed statistical reliability non objectivity. It is luminative research. Nevertheless, its greatest strenght the way in which it attempt to report: concisely, quickly, n straightforward, jargon free language; to reach decision akers, administrators, teacher trainers and curriculum de- velopers with accessible information and generalization which re immediately useful.

Methodology

This "illuminative" research and evaluation is concerned with description and interpretation rather than with measurement and prediction.

For this study, the study team carried out week long case studies in primary schools in Jakarta and near Pakanbaru in Riau, Eastearn Sumatera. The team selected the school, with specific certain criteria such as whether the school was considered "good" or not, how accessible it was, since, time of day it operated and location (i.e. urban/rural).

Findings

a. Concerning physical conditions:

Location of schools seem to be a somewhat hit and miss affair. Much has been written on school maping in recent years yet clearly bad mistakes are made.

Equipment was short in all the schools the team visited.

Concerning school organization:

Timetabling.

There is already a tendency for teachers to go on for far too long with a given activity and this is often reinforced by poor timetabling.

No children anywhere enjoy sitting through 3 hours on non-stop science or two hours on non-stop mathematics, especially if it is all by lecture class versus specialist teachers.

What seems certain is that teachers prefer to have specialization : it gives them status, they feel that they are better at some subjects than others; they have less preparations work to do as they are concerned with only one or two subject areas rather than having to prepare work across the curriculum.

c. Corcerning curriculum matters:

Mathematics and science are two the most serious problem areas.

d. Concerning methods:

The team would sugest that teacher trainers considers the following: encourage less talking by teachers and better interaction with children through competent question) answer technique. Encourage children to ask their own question, etc.

Recommendations

The problem of illuminative research is the generalisability of the fundings. Repetition of this work in others schools in other places, and a widening to include studies of religious and private schools would help to build up a much more comprehensive body of case studies. Poorer and remoter schools deserve such investigation.

Written by : Ajisuksmo Date : August 15, 1986

Revised by : Dr. Moegiadi Date : August 18, 1986

Title : National Assesment of the Quality of Indonesian Education (Survey of Achievement in Grade 9)

Total number of pages : 139
Text number of pages : 135

Researchers : MANGINDAAN, Christina S., SEMBIRING, Robert K, & LIVINGSTONE, Ian D.

Type of document : Research Report

Type of publication : Published

Date : 1978
Place : Jakarta, Indonesia

Host Institution : Office of Educational and Cultural Research and Development, MOEC, Indonesia

Funding source : Gov. of Indonesia and Gov. of New Zealand

Keywords : Quality of education, achievement, Indonesia, grade IX.

Summary

The basic idea of the study was to asses the extent of educational disparity in the country in terms of students' achie-vement in four subject-matters, namely mathematics, science, languages and social sciences. The researchers were

so try-ing to investigate the relationships between students' achie-vement with a number of home and school factors.

me factors : sex, age, general health, eyesight and hearing; size of family; economic status of home; occupation of father; parents' education; religion; language spoken at home; books in the home; amount of homework; and other home background factors.

School factors : type of school, size of school, size of class, sex of teachers, level of training of teachers, age and experience of teachers, salary of teachers, additional teaching profession, shared facilities, availability of textbooks, school libraries and their use, in-service training of teachers, sex of principal, age and experience of principal, frequency of staff meetings, school supervision and inspection, use of modern methods and other school factors.

Methodology

The sample of the study was randomly assigned as a national samples drawn from 10 regions of Indonesia.

Five standardized achievement tests and a questionnaire were administered to 9,337 nine-graders. Questionnaire were also distributed to the respective students, teachers and principals.

The characteristics of the tests are shown in Table-2.

Table-2 : Summary of characteristic of Grade 9 achievement tests

	No. of items	Time (mins)	Validity	Reliability KR 20	Reliability Spearman-Brown
Mathematics	80	120	0.52	0.80	0.88
Science	99	120	0.30	0.78	0.85
Social studies	99	100	0.59	0.79	0.90
Bahasa Indonesia	94	120	0.42	0.83	0.89
English	88	90	0.35	0.80	0.86

In order to determine the relationship between the criterion and the predictors, the researchers used multi-regression analysis with step-wise procedures.

Findings, Conclusions and Recommendations

It would be unreasonable to expect a large-scale cross-sectional survey to provide the policy-maker with a neat list of ready-made conclusions and recommendations for action. Educational evaluations are seldom as precise in their outcomes. But it is fair to expect a considered and cautious summary of the major findings which might have come bearing on educational policy. Many of the following will have quire further validation in experimental settings, and all of them

will need wide discussion in order to spell out likely financial, educational and political implications.

Only those findings which have some claim to be important for future policy will be outlined here. They should be treated as conclusions from the survey rather than as formal recommendations, since the latter would follow more fittingly from a critical team review at the end of the whole national assessment of achievement in Grades 6, 9 and 12. The reader is reminded that the findings only apply to Grade 9 students attending junior general secondary schools (SMPs), and not to all junior secondary students in Indonesia.

1. Regional differences

Extremely large regional differences exist in the levels of performance of Grade 9 SMP students. This is equally true in each of the five major subjects of the curriculum: mathematics, science, social studies, Bahasa Indonesia and English, and the differences found in Grade 6 are not lessened because of the selection process operating at entry to secondary education. If anything, these differences have grown larger. No information was available on the unit cost per SMP student, but it is likely that isolated rural areas are at a financial disadvantage. Certainly they are handicapped with less experinced and less well-trained teachers, and fewer texbooks and other facilities. It would be important for Indonesia to obtain firm data on the per-unit cost of each type of secondary education, so that decision on resource allocation could be made on a sounder basis.

· Differences between repeating rates

There is evidence from the survey that different standards are being applied in different regions of Indonesia in assessing students at the Grade 9 level; in other words, some students are being treated more severely than others. It is almost certain that standards between schools or districts, within regions, will show even wider variations. Further analysis of the present Grade 9 data might be useful to assess the seriousness of the problem, and to estimate the financial advantages which might follow if:

(a) the overall repeating rate could be reduced;
(b) the repeating rate more accurately reflected objective standards of performance.

If might also be desirable to consider whether a more radical policy change providing for simple age promotion through the first two years of SMP would be advantagesous for Indonesia. This would still allow a leaving examination to monitor standards in Grade 9, but would give greater freedom to teachers in the two lower grades. It would however, make heavier demands upon them, since they would then be required to teach students showing a wider range of ability in each class. A more adequate supply of textbooks would be required, and provisions for remedial work would be necessary.

3. Malaria

Gathering self-report data from a questionnaire is probably not a particularly reliable way of obtaining accurate information on past illnesses, but this survey has shown that Grade 9 students who claim to have suffered from

malaria show lower levels of scholastic achievement. The effect of malaria varies from region to region, but seems more potent in rural areas. There is no doubt that the goal of complete eradication of this disease from Indonesia is throughly worth-while, not only from the point of view of national health, but also from the point of view of better education.

4. "Bahasa Indonesia" in home

In general, Grade 9 students from urban homes where Bahasa Indonesia is spoken regularly, perform somewhat better than the remainder in the five major subjects of the curriculum. This remains true even when allowance is made for slightly more favourable home background conditions. However, SMP students from rural areas where a local dialect is the language of the home do not seem to suffer in comparison with those from rural homes where Bahasa Indonesia is used frequently. A more detailed investigation is needed to establish why this is so, and to trace the effects of local variations throughout the different regions of Indonesia.

5. School libraries and their use

The presence of a library in a school, along with an adequate supply of books for borrowing by teachers or by students, is a variable strongly associated with achievement, particularly in urban areas. It stands out as clearly the most significant of a cluster of 'school quality' variables, and is independent of home background factors, in both urban and rural areas. This is probably the single most significant finding of the present survey, and deserves close attention.

6. School rolls and class sizes

Neither the size of the total school roll nor the size of the individual Grade 9 class is consistently related to student achievement, when other relevant factors are controlled. There is some tendency for students from larger SMPs to do better, but this may legitimately be attributed to other more powerful variables relating to the quality of teaching and standard of facilities in the school. Larger schools also tend to have larger classes, but while the 'lecture' method of teaching predominates, it is unlikely that any financially realistic reduction in class sizes would have an immediate impact on achivement. However if so-called 'modern', more flexible methods of teaching are to be officially encouraged, some reduction in class sizes would clearly be necessary in many schools. Only then would treachers be able to give the attention to individuals and small groups of students which such methods require.

7. Shared facilities and afternoon schooling

There is a clear advantage to students attending morning rather than afternoon sessions, particularly in urban areas. A cluster of related variables occurs here, and the conclusion is different from that at Grade 6 level, suggesting that further investigation is necessary into the teaching and learning environments is SMPs using shared facilities.

8. Availability of textbooks

Results showed that, at the time of the survey, many students were without textbooks, particularly in mathematics. The problem was more acute in rural areas, but in

the light of the lack of consistence in the findings, it can only be concluded that the presence or absence of a particular text-book is not critical. It would be important to find out, however, how teachers regard the officially-prescribed textbooks, how suitable they are to their needs, and how they make use of whatever textbooks they do have.

9. In-service training of teachers

Grade 9 students taught by teachers who have been upgraded in special in-service training courses show higher achievement, particularly in mathematics and science in urban areas. This is a promising finding, and suggests that the courses should be extended wherever possible. The reasons why comparable results do not show in rural schools need investigation.

10. Staff meeting

The frequency with which staff meeting are held seems to be a good indicator of school efficiency. This is positively related to student achievement in both urban and rural areas, even when staff meetings are relatively infrequent.

11. Scholarships

The performance of students holding national, regional or other scholarships is uniformly low, in both urban and rural areas. It seems clear that the mechanism by which poor, but supposedly bright, students are recommended for scholarships is not an effective one, as presently operating. There are good arguments for the use of a secure, standardized test for the purpose of selecting scholarship

students, if a way can be found to overcome the associated administrative difficulties.

2. Sample design

In view of the tremendous differences in achievement between districts, and the very small differences within classes in Indonesian schools (certainly at Grade 6 and Grade 9 levels, and probably at Grade 12 level as well) there sound reasons for selecting a larger sample of districts and a smaller sample of students within classes, if any future surveys of this type are envisaged. By this means 'design effects' will be reduced and more accurate confidence limits established for the various statistics. Under these circumstances, real differences in achievement are less likely to be masked by clustering effects, and a more efficient research design achieved.

Finally, it should be emphasised that the conclusions which have been drawn in this chapter can only point to potentially important areas for investigation. They cannot by themselves be regarded as difinitive. Rather like the test bores drilled by engineers seeking for all, the indications from cross-sectional studies can certainly prevent large amounts of money being spent on fruitless exercises, but by themselves cannot tell the administrator exactly what he should do.

Re-analysis of the data using more advanced techniques, such as path analysis, could go some way towards establishing whether certain cause-and-effect hypotheses are more likely than others. But it is now necessary to follow these studies up with good longitudinal and experimental research if sound recommendations for policy are to be made.

Written by: Dr. Moegiadi Date : August 3, 1986

Title : National Assessment of the Quality of Indonesian Education (Survey of Achivement in Grade 6)

Total number of pages : 80
Text number of pages : 78

Researchers : Moegiadi; Christina S. Mangindaan; Warwick B. Elley

Type of document : Research report

Type of publication : Published

Date : 1976
Place : Jakarta

Host of institution : Office of Educational and Cultural Research and Development, MOEC

Funding source : Goverment of Indonesia and Govmerment of New Zaeland

Keywords : assessment, primary school, regional differences, mathematics, language

Summary

The assessment was intended to accomplish the following:

a. Locate those regions and school districts where achivement levels are high and low in different subjects of the curriculum.

b. Identify the particular condtions in school and home that are associated with various levels of achievement.

c. Determine those parts of the curriculum that are well or badly masterd by the pupils.

d. Produce baseline information about the education system aginst which to measure national progress in the future.

e. Provide a set of achivement against which to measure the perfomance of individual children and schools.

Other anticipated outcomes were a set of standardized achivement tests in Mathematics, Indonesian language (Bahasa Indonesia), Social studies, and Science; and also the training of the Office of Educational and Cultural Research and Development personnel and its networks in the provinces as well as the central MOEC office in Jakarta.

The study would answer, at least clarify a number of research questions related to diversity of students' achievement in Indonesia and its associated variables such as home background, school variables and other variables.

Methodology

A sample of 14,206 six graders was drawn from the national six graders population (1,285,500), 10 regions and 2,356 sub-district. Therefore, the sample was supposed to be a national one, randomly assigned with stratified sampling technique.

Four subject matters were choosen, namely Mathematics, "Bahasa Indonesia", Social Studies, and Science. Four type of achievement tests were tried out and developed with the following characteristics:

TABLE - 1

SUMMARY OF CHARACTERISTICS OF GRADE 6 ACHIVEMENT TESTS

	Number of Questions	Ariministra- tion Time	split Half Reliability	Average Difficulty
Science	60	90 min	0.85	45%
Mathematics	60	90 min	0.86	54%
Social studies	72	72 min	0.89	48%
Bahasa Indonesia	71	90 min	0.91	50%

Three sets of questionaire are tried out and administered to students, teachers, and headmasters in order to obtain data on the predictors such as, occupation of father, religion, size of family, birth order, language at home, economic status, parental interest, age, books at home, health of hearing, eye sight (as home background variables); type of school, size of class, size of school, level of training of the teachers, sex of the teachers, textbook, teaching experience of the headmaster, facilities (as school variables); classroom climate and additional variables like urban rural, leisure activities, repeater, expected educational level.

In data processing and anlyses, simple discriptive statistics and multiple regression analyses were used. Home background was treated as block I in the analysis; school variables as block II, and classroom as block III and IV was additional variables.

Findings/Conclusions

a. type of school: private school children show considerably higher achievement levels than children in public, subsidised and aided schools.

b. Size of class: unexpetedly it was found that children in larger classes perform better than those in smaller classes.

c. Size of school: again, those children who attend large school achieve at higher levels than those in small schools.

d. Training of teachers: those teachers with the longest periods of training produce higher achievement in their pupils than those with limited or no training.

e. Experience of teachers: with minor expception, those teacher who have taught long periods produce better results than those with little experience.

f. Sex of teachers: women teachers get better results from their pupils than men.

g. Age of teachers: generally, the trend is for the children with older teachers to do better.

h. Additional teaching posts: contrary to expectation, it was found that teachers who have position in more than one school, produce higher achievement level in their pupils.

MOrning and afternoon schools: there were only small differences in achivement level according to the time of day of the school.

j. Use of textbook: surprisingly, children with insufficient textbook do almost as well as children with plenty, and in Mathematics they achieve better. Futheremore, teachers who use the prescribe textbook showed inferior results overall.

k. In-service training teachers: little or no advantage was found in the achivement scores of children whose teachers had undergone in-service training.

l. Other school varibales: finally, higher achievement was shown by pupils in schools with many full time teachers, many part time teachers, school libraries, many classroom facilities, and teachers who use modern methods, frequent test and regular homework.

m. The home background of Indonesian grade 6 pupils accounts for 8.8% of the total variance in their achivement. Most of this influence is accounted for by the occupational status of the pupils' father, and by such indice as the number of books in their home, their family relegion and the economic status of their parents.

n. When the home enviroment factors are removed, certain school and teacher influences stand out. Foremost amongst these are the size of the class and school. Pupils from larger class achieve more highly, regardless of the home background or rural-urban differences. Schools with more classroom facilities and those characterised by modern methods, frequent homework and better lighting also show higher results. Pupils who attend private schools and

have female teachers also performs better, other things being equal. However, the total influence of all these school feature accounts for only 6.2% of pupils achivement differences. Neither the kind of training nor the lenght of experience of the teachers showed a marked impact on pupils achivement when the effect of home background were removed.

o. The largest influence on achivement is reflected in the indices of classroom climate. The pupils in classes where achivement level and educational aspiration are generally high, perform better regardless of the other home and school factors. The classroom climate factors account for over 46% of variance. This finding is interpreted primarily as unmeasured effect of good teaching, probably a feature the teacher's personality and interpersonal relationships with his or her pupils. Whatever its explanations, it is not easily affected by administrative policy desicions, but clearly deserves closer study.

p. City children achive more highly than rural children. this difference is explained, in similar proportion by home, school and classroom climate factors, and could not therefore be readily eleminated by policy changes.

Policy Implications/Recommendations

a. In view of the diversity of achivement levels among regions, shools and students, methods and procedure of resources allocation should be reviewed in order to make equalities of educational opportunity a more realistic goal.

b. Some considerations should be given to consolidate some small schools, if physically possible into larger ones.

c. The policy of using "Bahasa Indonesia" as medium of instruction has been very successfull if it's judged by grade 6 performance level.

d. The policy of setting students should be re-examined.

e. A policy of encouraging woman to enter teaching profession probably may rise the quality of education/achievement level.

f. It is not necessary that all students must attend morning schools.

g. Preparation of national and regional norm for each test and for total achivement.

h. Preparation of difficulty indices on each test item, broken down by region.

i. Multiple regression analyses between schools.

j. Multiple regression analyses for urban and rural samples seperately and for seperate subject.

k. Description of the characteristics and views of teachers and headmasters.

l. Identification of the characteristics of classes with very low achivement in different subjects.

m. Analyses of the "Bahasa Indonesia" test results in relation to home language.

Written by : Dr. Moegiadi Date : August 15, 1986

Title: Exploratory Study on the Solution of Dropout and Repetition in West Java

Total number of pages: 47
Text number of pages : 16

Researchers: MUCHTAR, Odang, et.al.

Type of document: Research report

Type of publication: Unpublished

Date: 1978
Place: Jakarta

Host institution/publisher: Office of Educational and Cultural Research and Development

Funding source: Government of Republic of Indonesia

Keywords: dropouts, repeater, primary school, regions.

Summary

The background of the study was the problem of drop-outs and repeaters from the primary level up to the higher education level.

The objective of the study is to know far the six treatments, namely automatic promotion (AP) + additional lessons (AL), intensification of the Indonesian Language (Bahasa Indonesia) (IIL), exchange of teachers (ET), home visit (HV), additional lessons (AL), and adjustment of holiday time (AH), affect the annual drop-out rate, the annual repeaters' rate,

the annual absentees' rate and students' educational gain in Science, Social Sciences, Mathematics, and the Indonesian Language.

The study was conducted in West Java, using 10 Primary Schools as the experimental group, each group consisting of 4 urban schools in Bandung Municipality and 6 rural schools located in the area of the District of Bandung. Selection of the sample schools was based on considerations about such variables as follows: (1) the schools represent the ordinary Indonesian Primary Schools, especially in terms of cumulative drop-out and repeaters' rate, (2) the school has normal (approriate) space for additional learning activities, (3) a school, of which the students do not use the Indonesian language much in conversations both outside and inside the school, (4) a school that does not suffer very much from the problem of changes of teachers, and (5) a rural school where a lot of students have to help their parents' work in a certain period of time due to the local production pattern.

The results of the experiment with the 5 treatments are as follows:

The experiment with AP + AL shows a positive result, namely, 63% students who were promoted automatically after having been given additional lessons proved to get promoted to higher grade levels. However, the treatment does not show positive signs as regards the drop-out rate and the absentees' rate. The experiment with the IIL treatment does not show any positive results; this might be caused by the inapporiate choice of samples. From this experiment, only the repeaters' rate shows positive signs, compared with the drop-out rate and the absentees' rate.

Another treatment, i.e. ET shows more positive results as indicated in the learning progress (learning achievement) made by the rural experimental Primary Schools. Similarly, the repeaters' rate tends to decline sharply, although the drop-out rate and the absentees' rate show a rising tendency. The HV treatment at the experimental schools has caused a considerable increase in the figures of learning achievements. The absentees' rate also tends to drop at these schools, but the drop-out and repeaters' rates have not shown a decline, compared with the control schools.

The second experiment of AL and AH treatments given to the experimental schools still does not indicate any positive results in terms of learning achievement, drop-out rate, repeaters' rate, and absentees' rate.

On the whole, it can be concluded that there are no identical class promotion norms for all sample Primary Schools, and that the mean of the academic report figures at these schools shows a negative correlation with Learning Achievement Test results.

Methodology

The method used in this study was the experimentation method, using two groups, namely the control group and the experimental group. Learning achievement test were given to both groups in four subject areas of Science, Social Sciences Mathematics, and the Indonesian Language, before and after the treatment which last one academic year.

Findings, Conclusions, Recommendations

The conclusions that can be drawn from the study are among others as follows: There is no appreacible effect of the six kinds of treatment (i.e. AP + AL, IIL, ET, HV, AL, and AH) on drop-out rates. Likewise, there is no positive effect of the six treatments show a positive impact on repeaters' rate, but the AP + AL, AL, and AH treatments do not show a positive impact.

Some of the recommendations made are as follows:

Experimentation with AP + AL treatment should be developed further as one of the methods to overcome the problem of class repetition, and thus to eliminate drop-out. Similarly, an experiment with the HV treatment should also be developed further. An experiment with IIE and ET should be developed using more appropriate samples.

Written by: Rusliansyah Anwar Date: August 6, 1986
Revised by: Dr. Moegiadi Date: August 9, 1986

Title : The Relationship between Instructional System with Student's Performance in Science: A Comparative Study of Student's Performance Using Modules and Non-module in Bandung 1984/1985

Total number of pages : 196
Text number of pages : 123

Researcher : Munaf, Syambasri

Type of document : Postgraduate thesis

Type of publication : Unpublished

Host instution/publisher : IKIP Bandung

Funding source : Personal

Keywords : achivement, aptitude, hypothesis, instructional system

Summary

The document is a postgraduate thesis submitted to IKIP Bandung. The main purpose of the study was to compare the achivement in science and aptitudes (learning ability) between the students of ordinary primary school (SD), general junior secondary school (SMP), and senior secondary school (SMA) and their peers from the Development School Project (PPSP) in which non-trditional methods of delivery system such as teaching using modules, were being used). The study mainly focussed on the last grade from each of the 3 levels of schooling (SD, SMP and SMA) and their comparable peers in the development school Bandung (West Java Province). Some

kinds of a quasi experimental design was used in the study which could also classified as causal comparative research. Two subsamples from 3 levels of schooling were studied.

Their achivement on science and aptitude were measured by using on achivement test and the SPM aptitude test. The data on other variables were sellected from the sample students by using a questionaire. The data were analyzed with the statistical techniques, such as chi square regression and Anova. The results of the study showed that the ordinary primary school students achived less and had lower learning ability than their peers in the development school. On The other hand , the opposite was true for the students at the secondary level - that is, the students from the ordinary schools achieved better and had higher learning ability. In general there was a positive relationship between students' achivement, their learning ability, and home background. From those findings the researcher concluded that the modular system was more effective for teaching science in the development primary school level than the conventional system, but was less effective in the secondary school levels in which more concept of science were taught. He then suggested that at the secondary level science should be taught with modular system in conjunction with a verbal system.

Methodology

The population of the study was the last year students of Primary School (SD), Junior General Secondary School (SMP), and Senior General Secondary School (SMA); and their comparable peers (grade 5,8 and 11) in the Development School (PPSP) in Bandung Municipality in 1984/85. To acvhieve its objective a quantitative approach was being used. The study can be classified as causal-camparative research which adopted some

kinds of quasi experimental design in which the researcher tried to compare the dependent varibales, students' science achivement and aptitudes between the two groups (students from tarditional and from the development schools) which undergone different treatment (different delivery systems - one using traditional method of of teaching; the other was using modules).

Purposive samples were drawn from the population which consisted of grade 5, 8, and 9 students of the PPSP on the one hand, and the last grade students of 3 SDs, 3 SMPs and 3 SMAs on the other. Each of these 3 schools represented good, medium, and bad schools.

The data were mainly collected from the students by using achivement tests, aptitude test (Standard Progressive Matrics), and questionaires. The data were then analyzed with statistics formulas such as chi square, simple regression, and Anova. The results from these analyses were displayed and discussed in the report.

Findings, Conclusions and Recommendation

The main results of the study were:

1) the primary school students achived less and had lower ability than their peers in the PPSP school, while the students of secondary school achived better and had higher ability than their peers in the PPSP schools -whether taken as a whole or whether they were grouped according to ablity levels;

in general there was a positive reltionship between students' achievement in science and their learning ability, although teh relationship for the senior secondary schools was very low (< 10% of the achivement variance was explained);

3) in general there were positive relationship between students' achievement and such background variables as learning facilities, parents' education and economic status in the traditional as well as in the PPSP schools. Other variables might have relationships with achievement for some groups of the students but not for the students from all different group.

From the findings above, the researcher concluded that the modular system was more effective to teach science than the conventional method at the primary school level, but less effective at the secondary school level in which more concept of science were taught. He then suggested that at the secondary level, in teaching science the modular system should be used in conjunction with the verbal system. He also suggested to do a further research to find out more about the nature of the relationships between achivement and the variables of the home background in the effort to improve students' achievement.

Written by : Dr. Jiyono Date : August 6, 1986
Revised by : Dr. Moegiadi Date : August 12, 1986

Title : Correlation between Educational Expenditure and Student Achivement of the Senior High School in Ujung Pandang

Total number of pages : 65
Text number of pages : 44

Researcher : Rasyid, Dermawan

Type of Document : Research report

Type of publication : Published

Date : 1983
Place : Jakarta

Host Institution/publisher : Office Educational and Cultural Research and Development, MOEC

Funding source : Goverment of Indonesia

Keywords : correlation, predictor, criteria, educational cost

Summary

The document is a research report submitted as one of the requirement of the educational research training organized by Office of Educational and Cultural Research and Development in 1983. The purpose of the study was to find out the relationships between the amount of schooling costs, the availability of learning facilities at home and achivement among the third grade of public senior general secondary schools(SMA) in Ujung Pandang Municipality.

The study was a survey type in which about 300 students from 3 SMAs were drawn as a sample. The data were gathered from the respondents by using questionaires and documentary study. The data were then analysed by using statistical techniques.

The study showed that there was no relationship between the schooling costs spent by the students and the number of books owned, and their achivement. However thewre was a positive relationship between the availability of other learning facilities and their achievement. The researcher suggested that further similar studies should be conducted by including more variables which might have relationship with achivement.

Methodology

The population of the study was all the third grade students in SMA in Ujung Pandang in 1982/1983. 380 students were taken as sample for the study by using a two stage cluster sampling design. The first three schools were drawn. Then the sample students were drawn randomly from the students in these schools. The data on students' achievement as a dependent variable were indicated by their average scores from the school report. The other data on independent variable - the schooling costs, and learning facilities - were gathered from the the students by using questionaire. The data were analyzed with statistical methods which consisted of univariate (frequency distribution) and multivariate analyses (multiple regression). The main results of analyses were presented and interpreted in the report.

Findings, Conclusions, and Recommendations

It was found that there was no relationship between amount of the schooling costs spent by the students and their achievement. There was no relationship between the number of textbooks owned by the students and their achivement. However there was a positive relationship between the availability of other learning facilities at home and the achievement.

From the above findings the researher suggested that further similar studies should be done by including more variables which might have relationships with achievement.

Written by : Dr. Jiyono Date : August 7, 1987
Revised by : Dr. Moegiadi Date : August 11, 1987

. Title : **The Relationship between Teacher's Background and The First Graders Performance in Elementry Reading-Writing in The Banjar Timur Sub District, South Kalimantan**

Total number of pages : 146
Text number of pages : 111

Researcher : Saberansyah

Type of document : Research report

Type of publication : Unpublished

Date : 1981
Place : Jakarta

Host institution/publisher : Office of Educational and Cultural Research and Development (Balitbang Dikbud)

Funding source : Government of Indonesia

Keywords : Achievement, reading-writing, primary school, regions

Summary

This was a preliminary research in the framework of a research of the correlation between the learning achievement in beginning reading-writing and the teacher's and the pupil's background. Data on school statistics of 1978 show that the repeater's rates for Grades I and II of Primary School (PS)

are 37% and 25% respectively. One of the factors causing the high repeater's rate is the pupil's limited ability to read and write. Limited ability to read and write will affect understanding of other subject matters.

The objectives of this research were as follows:

a. To know whether there is a correlation between learning achievement in beginning reading and writing and the teacher's background that consists of teaching experience, length of working period, diploma, sex, marital status, age receptive attitude towards teacher's task, and teaching facilities.

b. To know whether there is a correlation between learning achievement in beginning reading and writing and pupil's background consisting of age, kindergarten education, class repetition, parent's occupation, guidance at home, and selection of reading books at home.

The hypothesis to be tested in this research is that there is a positive correlation between learning achievement in beginning reading and writing and the teacher's and the pupil's background. The approach adopted is the comperative approach, namely, comparing the correlation between the variables of teacher's and pupil's background and low as well as high learning achievement.

Methodology

The research was conducted in Banjar Timur Subdistrict of South Kalimantan province, at 31 samples of Public Primary Schools. The respondents consisted of 31 PS teachers and 616 Grade I pupils of Primary School. Determination of sample

was done by drawing lots. The dependent variable of the evaluation was the learning achievement of Grade I pupils of Primary Schools in beginning reading and writing, whereas the independent variable was the teacher's and pupils background. Data were collected by means of reading-writing tests, interviews, and observations. A descriptive analysis method was adopted for the data analysis, and analysis of the two variables was done by way of Chi Square test and Gamma test (Yule's Q).

Findings, Conclusions, Recommendations

Results of the data analysis indicate a positive correlation between learning achievement in beginning reading-writing of Grade I of Primary Schools and the following variables: teacher's teaching experience, length of working period, age, marital status, and in-service training; teaching aids, teacher's guidebook; guidance at home; completion of kindergarten; availability of reading books at home; and parent's occupation.

However, some variables show insignificant negative correlation or positive correlation with the learning achievement of Grade I Primary Schools in beginning reading-writing, such as pupil's age, level of teacher's diploma, headmaster's guidance, availability of reading books in the class, teacher's sex, repeating classes, number of pupils in class, and teacher's receptive attitude towards teaching profession.

Based on the evaluation results, some recommendations were made as follows :

1. In selecting teachers for Grade I of Primary Schools, the Headmaster should take the following into consideration : the teacher should have received in-service training, be married, have longer period of work experience, be older, be given the opportunity to teach Grade I for several years. The Headmaster should also provide one set of teaching aids for the SAS method and a teacher's guide-book.

2. Headmasters and teachers of Grade I of Primary School should be able to maintain good cooperation between the school and the homes, so that parents can give learning guidance to their children.

3. Teachers of Grade I of Primary School should see to it that each pupil has reading books at home, or whenever necessary the school can lend him/her.

4. Since pupils who have joined kindergarten show better learning achievement, it is recommended that decision makers increase the number of kindergartens.

5. Research of similar kind should be conducted in the future using better instruments and analysis method.

Written by : Tukidja Date : August 18, 1986
Revised by : Dr. Moegiadi Date : August 20, 1986

20. Title : **The Relationship between a Number of Students' Characteristics and Their Performance in Grade I of The Open Secondary School 1982/1983**

Total number of pages:
Text number of pages: 282

Researcher: Arief, Sukadi Sadiman

Type of document: Dissertation

Type of publication: Unpublised

Date: April 1984
Place: Jakarta

Host institution/publisher: Faculty of Post Garduate, IKIP Jakarta

Funding source: Personal

Keywords: open secondary school, learning outcomes, students characteristics

Summary

The background of this research was the unavailability of necessary information about the characteristics of the Open SMP students and their correlation with the students' learning outcomes.

The objective of the research is to find out what characteristic variables of the students have the most dominant impact on the variance of their learning outcomes at Open

SMP; the relation between the students' learning outcomes and each of the characteristic variables being examined if their intercorrelation is not taken account; and the sequence of those characteristic variables based on their degree of correlation with the learning outcomes.

This research involved one criterion variable, i.e. cognitive learning outcomes (Y), and predictor variables comprising educational atmosphere (X1), level of intelligence (X2), student's attitude towards open SMP (X3), student,s educational aspirations (X4), and educational background of student's parents (X5).

The hypotheses to be tested in the study are as follows: (1) the learning outcomes is linearly comparable to each of the predictor variables; (2) the sequence of the the predictor variables with respect to the degree of their correlation with the learning outcomes is X1, X2, X3, X4, and X5; (3) the first four predictor variables together form a combined predictor that has the most dominant impact on learning outcomes. Furthermore, hypotheses is broken down into 5 sub hypotheses.

The results of the research show that except for the parents' educational background, the other four variables have a positive and significant correlation with learning outcomes.

On the basis of their degree of correlation with learning outcomes, the predictor variables can be arranged in the following order: home educational atmosphere, level of intelligence, student's attitude towards Open SMP, parents' educational background, and student's educational aspiration.

The first three of the five variable prove to constitute a linear combination that is the most dominant, where as the other two, i.e. parents' educational background and student's

educational aspiration, do not constribute significantly to the learning outcome variance. These three variables together can determine 76% of the learning outcome variance of the whole grade I students of the Open SMP.

With an intercept constant of -1.2214 and standard regression coeficient of 0.4336 for X2; and 0.1568 for X3, this regression equation formula for the research outcome has quite a high prediction value. This is proved by the low value of the standard error of estimate in comparison with the standard deviation of the learning outcomes.

Methodology

This research made use of the survey technique and correlation study. Grade I students were selected as the the subject of research whereas the Open SMP at Adiwerna and Kalianda were choosen as sample location of the research. From the two locations, 97 students were selected at random as the samples of the research.

There were four instruments used to collect data, namely, achievement test, questionaires, interview giude, and intelligence test. The collected data were analysed using the multiple regression analysis and partial correlation techniques.

Findings, Conslusions, and Recommendations

One of the conclusins of the study is that only a small number of the students had a good family/home educational enviroment. This is related to the fact that their parents' educational background was in general still low. On the

avarage, the student's intelligence level was normal. This also reveals that only 20% of the students had really a positive attitude towards the Open SMP, while the rest's attitude was so-so, but in general their educational aspiration was not low. Their learning achivements were in general still not satisfactory. Out of the maximum possible total score of 70, they earned only an avarage of 31.39 with the highest score of 59. If the correlation among the predictor variables are not taken into account, the students' learning outcomes have a posotive correlation with the five predictor variables being tested. If, on the other hand, the iompact of the correlation among the predictor varibales is controled, the degree of correlation between learning outcomes and each of students' characteristics variables becomes lower. The students' characteristics variables that have a strong impact on learning outcomes are family's educational atmosphere, intelligence level, and students' attitude towards Open SMP.

The recommendation made from the research findings is that a serious, well-planned effort be made to consolidate parents' operation and participation in education for their children at the Open SMP, particularly in creating sound family's educational atmosphere.

Written by : Rusliansyah Anwar Date: August 11, 86
Revised by : Dr. Moegiadi Date: August 14, 86

21. Title: The Effectiveness of Physics Teaching Using Modular Instructional System Used at PPSP, PPSI Methods and Conventional Methods of Teaching: A Comparative Study at the Senior High School in Jakarta, 1980-1982

Total number of pages: 454
Text number of pages : 217

Researcher : SASTROMIHARDJO, Kusno

Type of document: Dissertation

Type of publication : Unpublished

Date: September 1982
Place: Jakarta

Host institution/publisher : Post Graduate Faculty, IKIP (Teacher Training College) Jakarta

Funding source: Personal

Keywords: physics, conventional method of delivery system, senior high school, achievement

Summary

The background of this research was the idea that learning achievement is to a greater extent is determined by the teaching-learning method used. This research was meant to compare three kinds of teaching-learning methods, namely, the PPSP (Development School Project) modular method, the PPSI

(Instructional System Development Procedure) method, and the conventional method of teaching Physics, to find out which of the three methods is the most effective. The study was focussed specifically on the cognitive domain, which covers three learning categories, i.e. knowledge, understanding, and application.

The hypothesis to be tested in this study are as follows: (1) there is a significant difference in learning achievements between students that are taught by the PPSP modular method, PPSI method, and conventional method; (2) the PPSP modular method brings about the highest learning achievements, whereas the conventional method results in the lowest achievements; (3) there is an interaction between the teaching method and the learning category; (4) there is an interaction between the teaching-learning method and the students' intelligence; (5) there is interaction between the learning category and the students' intelegence; (6) there is an interaction among the teaching-learning method, learning category, and students' intelligence.

This research has two kinds of outcome, namely the primary research outcome (the outcome that stems from research hypothesis) and the secondary outcome (i.e. the outcome, of which its conclusions are derived from the process of research at the stage of testing the nill hypothesis). These research outcomes are as follows:

The primary research outcomes consist of the following: (1) there is a significant difference in learning achievements of students taught in the PPSP modular method, PPSI method, and conventional method; (2) the PPSP modular method yields the highest achievements, whereas the conventional method brings about the lowest achievements; (3) there is interaction

between the teaching-learning method and the learning category; (4) there is no interaction between the teaching-learning method and the students' intelligence; (5) there is interaction between the learning category and the students' intelligence; (6) there is an interaction among the teaching-learning methods, the learning category, and students' intelligence.

The secondary research outcome is that the teaching-learning method, the learning category, and the student's intelligence have a significant impact on the student's learning achievements.

Methodology

The method used in this research was the comparative experimentation. The experimentation consists of the experiments with the three teaching-learning methods, i.e. the PPSP, the PPSI, and the conventional; particularly for physics. Comparison was done about the effectiveness of the three methods, in order to find out which method was the most effective in view of the students' learning achievements.

The population of the study was 48 public SMAs (Senior High Schools) in the Special Territory of Jakarta, with Grade II Physics students and Physics teachers' as the samples. The research instruments consisted of treatment instruments (including pretest and post-test), summative test, intelligence measurements, students' personal data sheets, and teacher's personal data sheets. The design chosen for this study was the 3x3x2 factorial design.

Findings, Conclusions, Recommendations

Some of the conclusions of this study are as follows:

(1) The PPSP modular method yields the highest learning achievements, whereas the conventional method brings about the lowest achievements.
(2) The higher learning categories prove to be more sensitve to different teaching-learning methods than the lower learning categories.
(3) The difference in learning categories is more impressive to students of lower intelligence than those of higher intelligence.
(4) There is an interaction between the teaching-learning method and the learning category, but there is no interaction between the teaching-learning method and the students' intelligence.
(5) There is an interaction between the learning category and the students' intelligence, and also among the teaching-learning method, the learning category and the students' intelligence.

One of the recommendations is that a further study should be conducted involving not only the variables mentioned above (namely, teaching-learning methods, learning categories, and students' intelligence), but also the teachers' role as one of research variables. It is also recommended that a similar study be should carried out, involving the other learning categories within the cognitive domain, i.e. analysis, synthesis, and evaluation.

Written by: Rusliansyah Anwar Date: August 12, 1986
Revised by: Dr. Moegiadi Date: August 16, 1986

22. Title : Evaluation Report on the Primary School Teacher's Performance in Relation to the Utilization of Educational Radio Programme

Total number of pages : 19
Text number of pages : 18

Researchers : J. Simanjuntak dan Dakir

Type of document : Research

Type of publication : Unpublished

Date : 30 March 1979
Place : Jakarta

Host institution/publisher : No publisher

Funding source : Government of Indonesia

Keywords : Learning achievement, educational radio broadcast, primary school, teacher, rural

Summary

Education Radio Broadcast (ERB) has been implemented in eleven provinces since January 1977 by the Center for Communication Technology for Education and Culture, Office of Educational and Cultural Research Development (Balitbang Dikbud). It is intended to help the Primary Education Nurturing Project (P3D) in conducting in-service training of Primary School (PS) teachers, and to develop a conception and utilization of communication technology in particular by means of

radio. Radio broadcast can reach areas that lack physical communication means such as roads and public transportation and maintain the continuity of the training given by the itinerant (mobile) trainers. Besides, it can also transmit common problems faced by teachers in remote areas in a relatively short time and with less cost. By means of ERB teachers and educational implementors in the regions will be able to follow the latest development in education.

The objective of the evaluation is to know how far the ERB program can support the P3D in-service training program, and how far it can improve the knowledge of the PS teachers in the subject areas of the Indonesian Language and Mathematics.

Methodology

The population of the evaluation consists of teachers of Grade V of Primary Schools who have received in-service training from the Itinerant Trainers Team (P3D) in the District, who joined the ERB program and who did not join the ERB program in 1978. The sampling areas were determined on the basis of geographical and communication/transportation considerations.

The determination of the sample areas is as follows : six provinces, consisting each of one municipality and one district (kabupaten), each municipality/district consisting of two sub districts (kecamatan), and each sub district consisting of two PS. The two sub districts consist of one in the municipality/district and the other one located outside of the municipality/district. Thus, there are 6 provinces, 12 municipalities/districts, 24 sub districts, and 48 Primary Schools. Non ERB areas were selected as the control areas, which consist of four provinces consisting of eight sub

districts, each consisting of three Primary Schools. In all, the control areas consists of 4 provinces, 8 districts, and 24 primary schools.

The evaluation makes use of achievement tests for Mathematics and the Indonesian Language, and questionnaires. Data analysis was done as follows : (1) to find differences in learning achievement of Mathematics and the Indonesian language teachers between the experimental group and the control group, (2) to analyze in terms of recalling understanding, application, and skill; and to find out the level of difficulty, (3) to find out the intercorellation of variables in a matrix, namely the teacher's educational background, sex, teaching experience, subject area/class teacher, in-service training given by P3D, and experimental/control group, (4) to find out the regression between dependent variables and independent variables.

The dependent variables of the evaluation consist of the grades of the learning achievement in Mathematics and the Indonesian Language, whereas the independent variables consist of the teacher's educational background which is the highest diploma, sex, teaching experience, type of teacher, P3D training, and region/province.

Findings, Conclusions, Recommendations

Results of the evaluation show that there is no significant difference in teachers' learning achievement in Mathematics and the Indonesian Language between the experimental group and the control group; there is no significant correlation among variables for either the experimental group or the control group.

Besides, it is shown that the longer the teaching experience in Mathematics or in the Indonesian Language, the lower the learning achievement.

Based on the evaluation results, some recommendations are made as follows : The writing team of bokklets should make revision based on feedback from teachers. Test construction team should make sure that the test material is valid and varied. Teachers should not be reluctant to send feedback to the organizers of educational radio program. The superior or supervisor should supervise and guide regularly the teachers learning groups who participate in educational radio broadcast program.

Written by : Tukidja Date : August 18, 1986

Revised by : Dr. Moegiadi Date : August 19, 1986

Title : Factors Affecting The Quality of Learining Process of Six Graders

Total number of pages: 362
Text number of pages: 359

Researhers : Soediarto

Type of document : Dissertation

Type of publication : Unpublisne

Date : 1981
Place : Bandung

Host institution/publisher : Faculty of post graduate of IKIP Bandung

Funding source : Personal

Keywords : learning process, learning outcomes, cognitive and afective domains

Summary

Starting with 1974 Pilot Project Developmenttal School (PPSP) was established. A new curriculum for primary and secondary school was also started in that year which is known as curriculum 1975. The difference between PPSP and the ordinary schools were among others that in PPSP modular learning was applied. As a consequence of this system PPSP was supposed to reduce the allocation time from 6-3-3 (elementary-junior secondary-senior secondary school) to 8-3 (elementary -plus junior secondary school). The study was designed to test

whether PPSP system was more effective than the other ordinary school system in terms of learning process and learning outcome of the students. The study was also designed to explore what factors might influence the learning process as well as the learning outcomes.

The results of the study indicated that both systems, PPSP system as well as school system using 1975 curriculum, were more effective in terms of learning process and outcomes as compared to those ordinary system, that is a system using curriculum 1968.

Methodology

To accomplish the study evaluative model of research was used. Factors influencing the quality of learning process and learning outcomes were analyzed using variance and covariance analyses. To collect the data, the following instrument were used (1) achivement tests; (2) attitude scale; (3) cognitive ability tests; (4) student and teacher quetionaires; and (5) observation forms. samples for the study included the following categories:

a. Student

There were 1287 students selected for the study which consisted of 310 last grade student of the PPSP elementary school, 326 last grade student of the Non-PPSP elementary school rated as regular, and 333 last grade student of the Non-PPSP elementary school rated as excellent.

b. Teachers

There were 148 elementary school teachers for the study, which consisted of 38 PPSP elementary school teachers, 36 regular Non-PPSP elementary school teachers and 38 most favorable (exellent) non-PPSP elementary school teachers.

Findings

Some findings and conclusins of the study were formulated as following:

a. that PPSP and the 1975 curriculum had influenced the improvement of the quality of learning process experienced by students, as compared to the situation in 1972;

b. there was an indication that PPSP and the 1975 curriculum had influenced tha improvement of quality of the learning outcomes in terms of student level of mastery, as compared to the siruation in 1975;

c. the quality of learning process experienced by PPSP elementary school students were much better than those experienced by the Non-PPSP student (level of significance .001);

d. the disparity of learning outcomes of PPSP students from the different sociogeographical enviroment was smaller than those of the Non-PPSP students from different sociogheographical enviroments;

e. there were differences in the quality of learning outcomes between PPSP and Non-PPSP students in each sociogeographical enviroment (level of significance .001);

f. in general PPSP students achived better in Science and Indonesian Language, while Non-PPSP students achieved better in Mathematics and Moral Pancasila Education (PMP) (significance level .001)

g. in terms of affective learning outcomes there were also difference between PPSP students and Non-PPSP students. In general, PPSP students achieved better in productive attitudes and locus of control;

h. among the variables that siginificantly gave positive influence to the quality of cognitive learning outcomes were:

1) quantitative ability with beta S. .332, significance level .01;

2) verbal ability with beta S.245, significance level .01;

3) students' positive attitude to Science and Mathematics beta S. .177 significance level .01;

4) home learning enviroment with beta S. 116, siginificance level .01;

5) student's level of learning participation with beta S. .054, siginificance level .05.

i. among the variables under study, there were only four variables which significantly gave positive influence to the quality of affective learning outcomes, those were:

1) student's positive attitude to science and Mathematics with beta S. .030, significance level .01;

2) verbal ability with beta S. 116, significance level .01;

3) quantitative ability with beta H. 030, significance level .01;

4) student's level of learning participation with beta H. .030, significance level .05.

j. among the variables under study, there only two variables which significantly gave positive influence to the quality of learning process, those were:

1) test frequencies with beta S. .071, significance level .01;

2) types of test used with beta S. .071, siginficance level .05.

k. cognitive learning outcomes were significantly correlated with affective learning outcomes with r= .277, siginificance level .001.

Written by : Dr. Soemardi. Hs. Date : August 5, 1986
Revised by : Dr. Moegiadi Date : August 15, 1986

24. Title : The Impact of The Retraining Program on The Development of Teachers Personality in Raising The Affective Domain to Teaching-Learning Process and to Increase Rural Primary School Students' Performance

Total number of pages : 302
Text number of pages : 191

Researcher : Soekadji, Soetarlinah

Type of document : Dissertation

Type publication : Unpublished

Date : 1984
Place : Yogyakarta

Host institution/publisher : Gadjah Mada University, Yogyakarta

Funding source : Personal

Keywords : in-service training, affective domain, scholastic achivement, elementary school

Summary

It was recognized that scholastic achivement of primary school children should be increased in many ways. and, that the quality of primary educatuion would influence the quality of education for higher levels. The purpose of the study was to test whether or not the in-service training for the teachers in the area of affective domain would affect the scholastic achivement of the students in rural elementary schools.

The results of the study indicated that in-service training for the teachers would increase the level of student achivement especially in Pancasila Moral Education (Pendidikan Moral Pancasila -PMP). On the areas other than PMP the effect of in-service training in the area of affective domain seemed to be not significant.

The results of the study also indicated that achivement of the male students were generally more affected by the in-service training received by the teachers than the female students.

Methodology

The study was done using pretest-postest experimental design. The research sample consisted of 42 fith-grade primary school teachers that were randomly selected, and then randomly devided into experimental ands control groups. The study was carried out in one district of Sleman, Special Region of Yogyakarta.

The treatment of the study was in-service training program in the area of affective domain. As a meauring device for pretest and the postest, achievement tests in five subject matters had been contructed, i.e. Indonesian Language (Bahasa Indonesia), PMP, Science, Mathematics, and Social sciences.

A two-way analysis of covariance with covariables of intelligence and pretest was applied on data on individual subject matter as well as on the total. To detect whethter the treatment has certain effect on the affective performance of the teachers a manipulation check had been deviced. This was done

through the students evaluation on their teachers with a device called Expression Feeling Test. These data were also computed on Kruskal wallis Test.

Findings

A general conclusion could be drawn from the anlaysis that in-servive personal growth to enhance the affective domain of the educational teachers has some positive effect towards the student scholastic achivement, yet it does not evenly affect all fields of study.

The negative correlation between student evaluation on their teachers affective performance through the expression of feeling and their achievement increment in Mathematics is probably due to the method of instruction which requires substantial amount of intelligence and drills in the form of homeworks.

The low correlation between the achivement increment in Mathematics and the achievement in Indonesian language is probably is due to the lack of students ability to make use of linguistic capability to translate verbal expression into mathematical concepts and vise versa.

Some recommendation could be purposed as the following:

a. researchers in personal growth training should be further developed through improvement of their contents, process, as well as context of the in-service training program;

b. future researcher should utilize more heterogenouos subjects, at greater quantity, with lower drop-out rate, so that more powerful analytical tool could be applied;

c. to design a more sensitive measuring device for the evaluation of teachers' affective performance.

Written by : Dr. Soemardi. Hs. Date : August 5, 1986

Revised by : Dr. Moegiadi Date : August 11, 1986

Title : The Effect of Modular Instructional System and The Classical Approach toward Students' Achievement Considering The Intelligence Level and N-achievement of the Teacher

Total number of pages: 307
Text number of pages : 164

Researcher : SOENARWAN

Type of document : Research report

Type of publication : Unpublished

Date : January 1982
Place: Jakarta

Host institution/Publisher : no publisher

Funding source : Personal

Keywords : Self instructional method, modular approach, experimental school, need for achievement

Summary

The implementation of the government program on universalization of primary education for children aged 7-12 years should be supported by unconventional system of educational services.

A study of drop-outs indicates that 50% of the drop-out cases are caused by non-educational factors. This means that

provision of primary education services by way of the conventional system alone would not support the universalization of educational program.

One form of unconventional system is the IMPACT (Instructional Management by Parents, Community, and Teachers) Primary School (called SD PAMONG). This system is meant to provide educational services at the primary level for children who cannot take lessons at regular classes for some reasons. This system is implemented with the support of modular instructional materials. With the utilization of modules in the teaching-learning process, it is necessary to examine whether the quality of modular instruction outcomes are the same as or different from that of the classical teaching outcomes.

In order to compare the effectiveness of instruction, the following variables were determined: the modular instruction and the classical instruction as the independent variables, student's intelligence and teacher's need for achievement as the control variables, and student's achievements in Social Science and Mathematics as the dependent variables.
With those variables, the research questions to be answered from the study are as follows:

a. Is there any different effect between the modular instruction and the classical instruction on the student's learning achievements in Social Science and Mathematics?

b. What is the effect of the student's intelligence level on his/her learning achievements?

c. Is there any difference in effect between teachers with high need for achievement and teachers woth low need for achievement, upon the student's learning achievements?

d. Is there any interaction among the delivery method and the student's intelligence, and teacher's need for achievements?

e. Is there any interaction between the delivery method and the student's intelligence?

f. Is there any interaction between the delivery method and the teacher's need for achievement?

g. Is there any interaction between the student's intelligence and the teacher's need for achievement?

The conceptual bases for this research are as follows:

a. Classical teaching (instruction) is a teaching-learning concept that is focussed on the common characteristics and needs of the students;

b. Individual instruction is a teaching-learning concept that emphasizes the differences in characteristics and needs of the individual students. The modular instruction system practices individualized instruction;

c. Intelligence is a term that comprises three main ideas, namely the ability to adapt to and overcome new problems and situations, the ability to learn and accept education, and the ability to think abstractly, verbally, and mathematically;

d. In the teaching-learning process, the teacher plays a very important role, i.e. as the center of that very complex event. In a modular instruction system the teacher plays the role of a manager of the teaching-learning process.

The teacher is one of the external factors affecting the student's learning achievements. There are numerous factors that determine the teacher's success or failure in playing his/her role, one of which is his/her need for achievement. It is assumed that a teacher with a strong need for achievement will give stronger motivation to the students to reach higher learning achievements than does the teacher with a lower need for achievement;

e. Whether it is in Mathematics or Social Science, the student's active participation in the teaching-learning process plays an important role. Therefore, it is estimated that the learning achievements of students in the modular instruction system are better (higher) that those of students in the classical instruction method.

Methodology

The population of this research was taken from two locations of the SD PAMONG experimentation in Bali and Surakarta, whereas the sample was SD PAMONG in Surakarta since it was the center of the experimentation, and similarly was the SD (i.e. the Primary Schools).

The data collecting instruments comprised the following:

a. Children General Intelligence Test, to collect data on pupils intelligence.

b. EEPS (Edwards Personal Preference Schedule) Test, to collect data on teacher's need for achievement.

c. EBTA (Final School Examination), to collect data on pupils achievements.

This research was an experimental research using a 2x2x3 block factorial design. Analysis of the data was done by means of a 3-factor statistical method, namely the Anacova design and the 3-way interaction between the delivery system, the pupils' intelligence, and the teacher's need for achievement. Analysis of the differences in values was done by the Schieffe test.

Findings, Conclusions, and Recommendations

a. Findings

The research findings indicate that the modular and classical instruction does not show any significant difference in pupils' learning achievements. This is caused among other things by:

1) The surrounding society's condition

The experimentation of SD PAMONG was conducted in a rural area where the society's level of education was relatively low, so that it could not be used as a learning resource for the pupils. In a modular instruction system the society serves as one of the important learning resources for students.

2) Teacher factor

The teacher plays such a central role in the teaching-learning process, that the teacher's need for

achievement affects students' achievements. The teachers working at SD PAMONG generally have a low need for achievement, so that the pupils' achievements in turn tend to be low. However, the modular system still can be said to be effective, because in spite of the

low teacher's need for achievement the pupils' achievements at SD PAMONG are the same as those of the regular SD's pupils.

3) Pupils' intelligence factor

Pupils' of high intelligence tend to make a high grades (achievements), regardless of the teaching-learning method used.

b. Conclusions

1) There is no difference in learning achievements in Social Science and Mathematics between the modular instruction and the classical instruction.

2) Students of higher intelligence make better learning achievements than students of lower intelligence.

3) There is a considerable impact of the teacher's need for achievement on Social Science. If the teacher's need for achievement is high, the students' learning achievement is also high, and the other way round.

4) The impact of the teacher's need for achievement on Mathematics is seen in a combined interaction with the delivery method and the student's intelligence. This means that there is a varying combination of the

teacher's need for achievement, the student's intelligence, and the delivery system. For Mathematics, the modular instruction is more effective than the classical instruction on condition that the students' level of intelligence is high or average and the

teacher has a high need for achievement; whereas the classical instruction is more effective than the modular instruction in the case where the students having the avarage level of intelligence are taught by a teacher whose need for achievement is low.

5) The learning achievements are the same for both the modular instruction and the classical instruction in the following conditions:

a) Students of low level of intelligence are taught by a teacher having a high need for achievement;

b) Students of high level of intelligence are taught by a teacher who has a low need for achievement;

c) Students of low level of intelligence are taught by a teacher who has a low need for achievement.

c. Recommendations

1) The SD PAMONG can be continued as an alternative implementation of primary education in the framework of providing equal educational opportunity at primary level.

2) In disseminating SD PAMONG to the other areas, the condition of teacher's need for achievement should be taken into consideration.

3) Wherever there is no Open SMP in places of SD PAMONG experimentation, EBTA for faster students of Grade VI as well as outside Grade VI should be given at the same time as the nationally administered EBTA.

Written by: Bambang Indriyanto Date : August 12, 1986

Revised by: Dr. Moegiadi Date : August 13, 1986

Title : Research Report: Research on The Use Of Educational Media at The Senior High School in Bandung

Total number of pages : 145
Text number of pages : 90

Researcher : Suhendar, PS.

Type of document : Research report

Type of publication : Published

Date : 1986
Place : Bandung

Host institution/publisher : Research institute of IKIP Bandung

Funding source : Goverment of Indonesia

Keywords : Educational media, learning effevtiveness, educational efficiency, learning-teaching process, methods of delivery

Summary

Educational media is one of integral part of the learning teaching process as a whole, good educational media when they are used in the right time and context, certainly they will increase the effectiveness of the learning teaching process. Educational media will also make the educational experience richer and increase the educational efficiency and learning motivation of the students. Eventhough almost every teacher knows the importance of using the educational media to increase teaching effectiveness the fact remains that more than often educational media have not been properly used.

The study was designed to see whether: (1) educational media which were available in schools were properly and efficiently used; (2) school lab and its equipment were fully utilized; (3) teacher's skill and competencies were adequate to handle the assigned job.

Methodology

The study was carried out in Bandung municipality covering all senior high schools in the city as the population of the study. To draw the sample for the study, stratified random sampling method was applied. There were ten schools selected for the sample covering 145 students and 32 teachers as the respondents for the study. Data and information were collected through questionaires for both respondents i.e. students and teachers; and the interview schedule for the headmaster for those sample schools. The study was descriptive, therefore, descriptive analysis was used to analyze the data.

Findings

The conclusions of the study were formulated as the followings:

a. in general, both students and teachers know very well about learning media and learning equipments, since they were available in most of those sample schools;

b. most of the teachers in the sample schools confirmed that they are used lab equipment, such as microscope, as teaching media in the classroom;

c. also, most of the teachers confirmed that educational media, like lab equipments, were quite helpful and able to increase the learning outcomes;

d. in terms of the compentencies in using educational media, including those lab equipments, some teachers said that they were quite skillful, but some others said admitted that some tarining were needed to increase skills of know-how in using efficiency educational media in general, and lab equipment in particular.

Written by : Dr. Soemardi, HS. Date : August 7, 1986
Revised by : Dr. Moegiadi Date : August 15, 1986

27. Title : he Contribution of Teaching Concept and N-Achievement towards Learning Process and Outcomes

Total number of pages : 355
Text number of pages : 305

Researcher : Sukmadinata, Nana syaodah

Type of document : Dissertation

Type of publication : Unpublished

Date : 1983
Place : Bandung

Host institution/publisher : Faculty of post garduate IKIP Bandung

Funding source : Personal

Keywords : teaching concept, teacher motivation, teaching process, student achivement

Summary

This study was designed to answer three main questions i.e. (1) to what extent do the teaching concept and teacher's motivation contribute to the student achievement; (2) which of those teacher variables have the greatest contribution to the teaching process and student achievement; and (3) did the school enviroment have some influence on the teaching process and student achievement.

Through the study a concentration was focused on the problem of increasing the quality of education. There are so many factors, internal as well as external, influencing the quality of education, among those is the teacher factor. It is therefore, the intention of this study that the findings drawan from it could contribute to the development of education in genaral and teacher education in particular. Also, the results of the study were expected to contribute to the development of teaching-learning methodology in the classroom, development in-service training for teachers, and increasing the managerial skills of the headmasters and suprvisors.

Methodology

The study was conducted in West Java Province covering one municipality and five districts (kabupaten); those were in Bandung municaipality, the district of Bandung, Sumedang, Ciamis. Tasikmalaya and Garut. The population of the study was junior secondary school teachers according to the five main subjects, those were Indonesian Langguage, English, Mathematics, Science and Social sciences. The student population covered in this study included those third graders of the junior high schools in those selected areas. To selected the sample for the study stratified sampling was used. There were 370 teachers and 770 students selected for the study.

The data concerning the main variables were statistically using the correlation and regressionn techniques. Complementary data were processed using Anova technique. Based on the above mentioned procedures, the following results have been obtained :

a. all variables related to the teachers significantly showed postive correlation with the student achievement (R= .39);

b. teaching concept and motivation had a positive correlation with the teachers performance (R= .31);

c. the strata and administrative localities of schools had a fairly strong tendency of affecting the teaching process and the students achievement.

Findings

a. teaching asa a method of delivery gave a high contribution to the success of the larning activities of the student;

b. teacher preparation gave a siginificant contribution to the effevtiveness of the teaching job;

c. teacher motivation gave a high contribution to the student achievement;

d. school climate and school enviroment seemed to give much influence to the effectiveness of the process of teaching and the student achievement.

Written by : Dr. Soemardi, Hs. Date : August 5, 1986
Revised by : Dr. Moegiadi Date : August 12, 1986

28. Title : The Contributions of Intelligence, N-achivement, Learning, Attitude and Learning Habit towards The Scholastic Achievement of The Senior High School Students in West Java

Total number of pages : 291
Text number of pages : 243

Researcher : Sulaeman, D.

Type of document : Dissertation

Type of publication : Unpublished

Date : 1984
Place : Bandung

Host institution/publisher : Faculty of post graduate IKIP Bandung

Funding source : Personal

Keywaords : intelligence, learning motivation, study habit, attitude, cognitive achivement, quality of education

Summary

The main issue whicxh this study was to dela with was closely related to the problem of educational quality, especially related at the senoir high school level. The quality of students achivement which considred as one of the indicators of the quality of education is influenced by various interacting factors in the taching learning process. These factors

include conditions of individual students, the learning materials presented, the system of presentation other instrumental factors and also enviromental factors, both inside and outside the school.

The stu-dy was designed to see the effect of several conditions of the individual students upon their learning achivement. The selected variables for this study were: (1) intelectual variable (intelligence) which is innate capacity and a fundamental tool in learning activities; (2) achivement motive which is a generator cativities; (3) attitude to learning; and (4) study habits related to the ways of studying as well as the ways of doing assignments.

Methodology

The study was carried out in West Java Province using the third grade senior high school students as the population of this study. In 1981/1982, when the stduy was done, there were 70 schools which had two selected streams: exact and social science. The total number of the the third grade students was 10,774 social science students. stratified random sampling was drawn according to to the condition of the schools as to good, medium and bad schools. And the total sample drawn was 960 of science students and 950 950 social science students.

Questions, of which the answer were revealed in this study were as follows: (1) how much was the contribution of intelligence, achivement motive, study attitude and habit to learning achivement (2) was there any siginificant difference in intelligence, achivement mtive, study attitude or habit, between high achievers and low achievers ; (3) was there any difference intelligence, achievement motive, study attitude

or habit, between science and social-science students; and (4) did achievement motive, study attitude and habit of West Java senior high school students tend to be high or low?.

The study used for data collection instruments, including (1) Advanced Progressive Matrics (APM) to measure inteliigence; (2) achievement Motive Scale; (3) Study Attitudes Scale; and (4) Study Habit Scale. The stduents final semester scores of academic year of 1982/1983 were used for learning achievement. The analysis of data as to the contribution of intelligence, achievement motive, study attitude and study habit to learning achievement was carried out through cerrelation and regression analysis techniques.

Findings

Some findings of the study were as the followings:

a. generally, each predictor variable and the combined variables contributed significantly to the learning achievement of the students;

b. There was significant difference in the intelligence, achievement motive, study attitude and study habit between high and low achievers, both in the field of science and social science;

c. Science students wer higher in intelligence than social science students. The significant level was .001. The social sciene students were higher in achievement motive (significance level .05). There was no significant difference between the two groups in the study habit;

d. there was a strong evidence that more intelligent students tended to have less achievement motive, while less intelligent students tended to have higher achievement motive;

e. results of this research indicated that both intellectual and non intellectual factors played an important role in determining the success of the students academic studies.

Written by : Dr. Soemardi, Hs. Date : August 5, 1986

Revised by : Dr. Moegiadi Date : August 15, 1986

29. Title : A Comparison between Modular Instructional Strategy and the Presentation Instructional Approach in Relation to The Independency of Grade III Senior High School in Yogyakarta

Total number of pages : 104
Text number of pages : 69

Researher : Sulistiyono, T.

Type of document : Research report

Type of publication : Published

Date : 1983
Place : Jakarta

Host institution/publisher : Office Of Educational and Cultural Research and Development

Funding source : Goverment of Indonesia

Keywords : modular instruction, lecture, independency, learning pattern

Summary

The purpose of the study was to test whether the difference existed between the results of learning using modular instructional approach and those using lecture based of teaching in terms of the independency of the students. The study was carried out in Yogyakarta using the third grade senior high school students in Yogyakarta as sample frame of the study.

This is an experimental study comparing two different treatments to two different groups. For the group one modular instruction, as a treatment, was applied; while for the other group the lecture based teaching was applied.

The results of learning using different approach of teaching was compared to see whether siginficant differnce exists in terms of the independency attitude of the students.

In general, the results of the study indicated as the followings:

a. there was no significant difference in terms of independency of the students whether they were taught using modular instrauction or lecture approach;

b. there was no significant difference in terms of independency between male and female students;

c. modular instruction tended to be more fir to apply for female students, while lecturing tended to be more fit to apply to male students.

Methodology

Two schools were selected as subject of the study. One school received lecture as methods of delivery. The results of the learning-teaching process using different methods of teaching were tested using the interview schedules to see whether a significant difference exists between the two groups in term of independency attitude of the student. The two groups were

further devided into male and female student. The hypotheses of the study were formulated as the following:

a. there will be a significant difference in terms of the independence attitude of the students when they were taught using different methods of dilevery. The group which was taught using modular instructional approach will be more indepedent rather than those who was taught using lecture approach;

b. there will be a significant difference in terms of independency attitude between male and female students. Female students tended to be more independent when compared with students.

The data were analyzed using variance anlaysis, on the basis of the three assumption below:

a. it was assumed that the subjects under study were randomly selected and independent one from the other;

b. it was also assumed that distrubution of the population under the study was normal; and

c. that variance of each of the population show no significant differnece.

Findings

a. according the results of the study it seems that modular instruction used as method of teaching need to get further consideration, when independency attitude is the objective of the teaching;

b. male and female students are the same in terms of independency attitude whatever methods are used as the system of delivery, whether it is modular instrudction or lecturing;

c. when the number of female students is dominant in the classroom population, the modular instruction approach is more recommended to use in the teaching-learning process rather than lecture approach.

Written by : Dr. Soemardi. HS. Date : August 9, 1986
Revised by : Dr. Moegiadi Date : August 13, 1986

30. Title: National Assessment of the Quality of Indonesian Education (Survey of achievement in Grade-12)

Total number of pages : 120
Text number of pages : 116

Researchers : SUPRAPTO, SEMBIRING, Robert K., LIVINSTONE, Ian D.

Type of document: Research Report

Type of Publication: Published

Date: 1981
Place: Jakarta

Host Institution: Office of Educational and Culture Research and Development Ministry of Education and Culture Indonesia

Funding source: Government of Indonesia and Governement of New Zealand

Keywords: Quality of education, achievement, Indonesia, grade XII.

Summary

The study was aimed at assessing the achievement level of the 12-Graders students in Indonesia in Mathematics, Science, Languages and Social Sciences and investigate the relationship of students' achievement as criterion and a number of variables, namely home background, School factors and other factors.

Home background: Sex, Age, General Health, Eyesight, and Hearing; size of familiy; economic status of home; parents education; parents' income; number of textbooks owned; language spoken at home; educational expectations; and other home background factors.

School factors: type of school, size of school, size of class, number of teachers, sex and experience of principal, training and experience of principal, income of principal, school' libararies and their use laboratory facilities, laboratory experiments, shared facilities and afternoon schooling, visual aids, and other school factors.

By administering standardized achievement tests and questionnaries to 7.179 12-Graders and questionnaires to 12-Grades teachers in the respective subject matters and Head-masters and by applying multi-reguession analyisis (achieve-ment as criterion and home background/school factors as predicators), the researchers found out various relationships between the creterion and predictors as presented in the next section of this abstract.

Methodology

Standardized achievement tests in a number of subject matters with their characteristics listed in Table-1 below, were administered to 7.179 of Grade-12 students in 10 regions of Indonesia. Therefore, the sample was a national one. (Please refer to Tabel-2 for more information).

Table-1 : Summary of characteristic of Grade 12 achievement tests

Test	No. of items	Time (mins)	Reliability Coefficients KR 20	Spearman-Brown
Arts Stream				
Civics	60	90	0.85	0.87
Indonesian	103	120	0.85	0.87
English	65	75	0.89	0.90
Economics	60	90	0.78	0.79
Geography	60	90	0.55	0.57
History	60	90	0.79	0.79
Science Stream				
Civics	60	90	0.85	0.87
Indonesian	98	120	0.87	0.88
English	65	75	0.89	0.90
Algebra/Analitic Geometry	45	90	0.85	0.87
Trigoneometry	43	90	0.87	0.88
Solid Geometry	41	90	0.83	0.83
Chemistry	60	90	0.84	0.87
Biology	60	90	0.86	0.87
Physics	40	90	0.70	0.64
Mechanics	45	90	0.74	0.74
Geophysics/ Astronomy	39	60	0.72	0.72

Multi regression analysis was applied in determining the relationships between students' achievement in various subject-matters under the study and a number of variables explaining the background and characteristics of the students.

Findings and Conclusions

A large-scale cross-sectional survey is not designed to provide simple and concise answers to complex political and financial questions with a neat list of recommendations for action. What follows therefore is a considered and coutious summary of the major findings of this survey which might have some bearing on educational policy. Others may interprest the findings in different ways, but we have attempted to provide an interpretation which is as true to the data and to the Indonesian scene as we can make it. Many of these tentative conclusions will require in-dept study in experimental settings, but some could be acted upon without delay.

The reader is remainded that these findings apply only to Grade-12 students attending academic senior secondary schools (SMAs) and not to students attending any one of several parallel types of schools at this level.

1. Regional Different

Although most SMA are located in urban areas, and the large majority of their students live in urban areas, regional differences remain substantial. The range from highest to lowest of tne ten regions discussed in the study was much the same as that found in Grade-9 and even larger than that found

in Grade-6, for every subject which allowed this type of comparison, in both Arts and Science streams. On the other hand, urban-rural differences have narrowed at the Grade-12 level. This is probably because relatively few rural students are able to attend an SMA, and they therefore form a more highly selected and homogeneous group.

2. Arts and Science Streams

It is clear that throughout the whole of Indonesia, the more able students are taking Science courses in their terminal year in SMA, because these are a pre-requisite for more prestigious forms of higher education. This hyphotesis is based on evidence from their superior performance, in every region, on the common core of subjects comprising civics, English and Bahasa Indonesia (Indonesian).

3. Sex Differences

The rate of drop-out from SMPs and SMAs is greater for girls than it is for boys, so that there are nearly two boys to every girl at the Grade-12 level. The sex bias is extreme in favour of boys taking science, but much more balanced in Arts streams. The girls tend to perform better than boys in every subject. There are of course fewer of them, so selectivity is a factor to be taken into account.

4. Indonesian in the Home

By the time students have reached the Grade-12 level, it matters very little how often Indonesian (Bahasa Indonesia) is spoken in the home. There are few differences in any region, except a puzzling tendency for students in regions where Indonesian is commonly spoken to do better in English at school, but not in Indonesian. There is no consistent

evidence to show that the introduction of Bahasa Indonesia has had any adverse affect on the general achievement of Grade-12 SMA students.

5. Text-books and Newspapers in the Home

Access to agood supply of reading material in the home is important at Grade-12 level, as at other levels, and those homes which were able to afford a regular newspaper, subscription or a good stock of text-books, produced students with superior achievement.

6. School Libraries and Their Use

About three-quarters of SMA students have access to a school library, but only about half of them have a choice of more than 450 books. There seems to be a distinct division at about 250 books; below this 'critical mass' total achievement was well below average, above it, achievement was quite superior.

7. School Rolls and Class Sizes

In Indonesia large classes tend to go along with large schools, and with all the other characteristics of large schools, including better facilities and equipment, more experienced teachers, a greater number of students applying for entry, and a more highly paid (although not necessarily older or more experienced) principal. Size of school was a more powerful variable at the SMA level than it was at SMP or SD levels, and even after the effects of home background and school quality variables had been removed, still contributed some variance in achievement, particularly in Science subjects. Size of class showed no consistent relationship with total achievement scores, and does not seem to be a

variable worth trying to manipulate unless new teaching methods, more suited to small group and individualized intruction, become widespread in Indonesia.

8. The School Principal

A most important cluster of variables related to the income, experince and training of SMA principlas, nearly all of whom were men. When taken together these variables far outweighed the effects of any other school or home background factors.

There was a tendency for well-trained and highly paid principals to administer schools enrolling students from affluent and literate homes, but even when this is allowed for, the quality of the principal seems to be paramount in influencing the quality of scholastic performance in the school.

9. In-service Training of Teacher

Grade-12 SMA students in schools where a majority of teachers had attended upgrading courses showed higher achievement levels than the remainder, and the relationship remained a strong one even after the varying backgrounds of students had been allowed for. Teachers who had attented such courses were much more likely to be allocated to Science stream than to Arts stream classes.

10. Laboratory Facilities and Visual Aids

Access to at least one science laboratory in an SMA is important for achievement in each of the three science: physics, chemistry and biology. In addition, there was a positive relationship between the number of science experiments undertaken and total achievement, for students in

Science streams.

For students in Arts streams, the presence of visual aids in the school was associated with achievement, although there were no clear linkages between achievement in particular subjects and the presence of the appropriate aid. The few schools without such aids showed uniformly low levels of achievement.

However, all the variables relating to the physical facilities in the school were outweighted in their contributions to variation in achievement by the large contribution made by the cluster of variables relating to the school principal.

11. Shared Facilities and Afternoon Schooling

There was an apparent advantage to students attending school in the morning, rather than in the afternoon (usually in shared facilities), but after the more powerful home background and school quality variables had exercised their influence, these two variables explained little further variation in total achievement. It appreated that students attending in the afternoon were less able, since they were older and had therefore probaly repeated a class. They were more likely to be in an Arts stream, and their teachers were less familiar with the various facilities in the school buildings, or else did not have access to them.

12. Teachers' assessments

The relationship between teachers' assessments of classroom achievement in each subject and standardized test scores in those subjects was uniformly low, suggesting that assessment standars at the Grade-12 level very widely between different schools and regions in Indonesia. If teachers' assessments

are to be used for certification and selection for higher education or employment, some method of 'moderation' or establishing parity between these grades would need to be implemented, so that a fair and consistent standard could be remaintained throughout the country.

The report does not submit any recommendations.

Written by: Dr. Moegiadi — Date: August 3, 1986

Revised by : — Date:

Title : The Influence of Non-intelectual Factors towards Underachievent : A Research at The Development School Pilot Project

Total number of pages : 493
Text number of pages : 428

Researher : Moh. surya

Type of documentation : Dissertation

Date : 1977
Place : Bandung

Host institution/publisher : Faculty of post graduate IKIP Bandung

Funding source : Personal

Keywords: underachievement, needs, attitude, habit, childhood experience, curricular learning interest, family background

Summary

The degree of scholastic achievement of student was primarily influenced by, at least, three components in the educational process, those were the learner, the learning process and the situation. Primarily the aintellectual factors, but also the non-intelectual ones, both were influenceing the degree of achievement reached by the student through the learning activities. Individual difference in scholasctic achievement could be explained by the interaction among those factors. Some non-intellectual factors which were identified in this

study include various needs, study habits and attitude, childhood experiences, curricular learning interest and family background.

The study was designed to describe to what extent those the non-intellctual factors would likely influence the underachievement students.

Methodology

To carry out this study descriptive method of research was used. The study wanted to describe the major characteristics of the underachiever, and what type of factors would likely influence them. Data collection for this stduy were concluted through activities like survey techniques, testing, quetionaires and documentary study.

The senior secondary school students in eight Development School Projects (PPSP) were used as the population of the study, while the sample frame for the study were those underachievers of the PPSP students. To indentify the underachievers of those schools testing procedures were used by applying the 6 standard deviation below the calculated mean. There were 1,612 students in those lihgt schools which were used as population of the study, consited of 596 students of grade one, 523 students of grade two, and 484 students of grade three. Among those were 1,002 male students, and 609 female students.

Findings

Some findings of the study were formulated as the following:

a. among those non-intellectual varaibles identified in the study as most influential to the underachievement of the

students were needs and student interest on learning. But if the process of learning was the concern, student's attitudes and study habits were factors which were most influential. In the meantime factors such as those family bachground and childhood experience were also quite influential to the underachievement of the students;

b. interest of individual needs, the difference between underachievement and overachievement was merely a difference in the intensity. The low intensity of the individual needs was closely related to such characteristics as dependency, lack of self-confidence, unstable mental development and neurotic;

c. in general, attitude and study habit gave much influence to underachievment in terms of educational attainment in school;

d. underachievement was also influenced by the the childhood experiences, including the family background of the student.

Written by : Dr. Soemardi. HS. Date : August 6, 1986
Revised by : Dr. Moegiadi Date : August 15, 1986

32. Title : A Process of Socialization in Indonesia Primary School in Agricultural Area (A Case Study)

Total number of pages : 50
Text number of pages : 50

Researchers : Suryadi, Ace and Jiyono

Type of document : Research report

Type of publication : Published

Date : 1980
Place : Jakarta

Host institution/publisher : Office of Educational and Cultural Research and Development

Funding source : Goverment of Indonesia

Keywords : paradigm, qualitative, socialozation, typical

Summary

The document was a research report which was submitted to the South East Asia Regional Seminar on Qualitative Research held in Bangkok in 12-16 January 1981.

The study was a case study in which a qualitative research approach was used. The research was aimed to find out about the process of socialization of the primary school students in an agricultural area. The school chosen as a case was a typical primary school in an agricultural area in West Java.

The study found that the school physical codition and learning facilities were generally not conducive for learning, and there were a lot of improper (bad) teaching learning practices in the school. This was interpreted as mainly the results of a lack of teachers' competence and dicipline and a lack of proper supervision from the headmaster and above. To remedy this situation, it was suggested that teachers should be trained and supervision should be encouraged.

Methodology

As in any other case study, this study used a qualitative approach. The study employed a socio-anthropological approach and not aimed to get the results which were generalizable. The study was exploration-in nature and was aimed to find theories or hypotheses based on observation and scientific impression of the researchers while participating with the subjects.

The school selected as a case to be studied was a typical prymary school in an agricultural area in West Java. Two researchers from the Office of Educational and Cultural Reseacrh and Development carried out the study. The data were collected mainly through observation and interviews. They stayed in the school for 2 weeks and were able to collect data in a natural setting. The data were then analyzed and interpreted in a qualitative manner.

Findings, Conclusions and Recommendations

The main results of the study were as follows:

a. physical conditions of the school as a whole and the calssrooms in particular were not conducive for learning;

b. there was a lack of teaching facilities/aids/books, and the ones which were available were not properly taken care of and rarely used;

c. there was a lack of supervision, either from the headmaster as well as from his/her supervisors;

d. there was rarely any "active learning" in the calssrooms;

e. there was rarely proper aspects of "good teaching" such as lesson preparation, the used of feedback and corrective, etc;

f. time used by the students for doing tasks (time on task) was very small -about 30% to 40% of the formal time;

g. similar teaching -learning process occured in all classes.

From the above findings it was concluded that the teaching process did not take in account the stages of child development. There was also a lack of understanding on the part of the teachers and headmasters on the importance of the effect of the school physical conditions and learning facilities (aids/books) towards the students' learning success. The tachers either had little knowledge and skills or were reluctant to carry out "good teaching". Dicipline had not played important roles in developing students at school.

To improve the above weakness it was recommended that teachers should be trained on the relevant matter and supervision from the headmaster and above should be encouraged.

Written by : Dr. Jiyono Date : August 5, 1986
Revised by : Dr. Moegiadi Date : August 11, 1986

33. Title: Indonesian Language (Bahasa Indonesia) Proficiency of The Six-graders with Bugenese mother-tongue: Listening and Speaking

Total number of pages: 271
Text number of pages: 207

Researchers: SYARIF, Abdul Aziz, et.al.

Type of document: Research report

Type of publication: Published

Date: 1981
Place: Jakarta

Host institution/Publisher: Centre for language development, The Ministry of Education and Culture

Funding source: Government of Indonesia

Keywords: Language ability, primary school, regions, Urban

Summary

The background of the study is the assumption that between two types of languages as media of communication, the spoken language is more important than the written. This has become a popular opinion since the 2nd World War. The spoken language includes listening and speaking, which are both required for language activities. Therefore the mastery of both aspects of the "Bahasa Indonesia" must become the prime targets of the Indonesian teaching at Primary School level.

In this context it is necessary to obtain information on students' two aspects of language ability: listening and speaking.

The purpose of the study was to find information on the "Bahasa Indonesia" ability of primary school students with the Buginese mother tongue in terms of the ability to listen-/understand other person speaking (which includes discriminative, retentive and comprehensive ability). As well as the ability to speak including the ability to express and reveal the idea logically, accurately and fluently.

The research is based on the hypothesis that the "Bahasa Indonesia" ability (listening and speaking) of Primary School student with Buginese mother tongue is low with regard to the aim of the Indonesia Language education. Another hypothesis proposed in the study is that the students' bahasa ability is determined by location factor, meaning that students living in the urban areas have higher "Bahasa Indonesia" ability than those living in the semi urban areas.

The population used in this study are grade VI Primary School Students living in the urban and semi urban areas with Buginese mother-tongue. The sample used is proportional sampling.

Results of the study reveals that for discriminative aspect of listening ability, the mean score is 14.65 for the urban schools and 13.80 for the semi urban schools, while the collective mean score is 14.22 (the highest possible score is 20). The retentive listening ability tested through story telling and message resulted in 2.2 for story telling of the urban schools and 1.8 for the semi urban schools; and the collective score is 2 (the highest possible score is 5).

The mean score of message delivery is 5.83 for the urban and 4.99 for the semi urban areas, while the collective mean score is 5.41 (the highest possible score is 15).

The level of comprehensive listening ability is tested through the use of questions and statements (phase I), and dialogue (phase II); which resulted in the mean score of 11.49 for phase I for the urban schools and 10.20 for the semi urban schools; or the collective mean score of 10.84. The phase II resulted in the mean score of 3.95 for the urban and 3.80 for the semi urban schools, or with the collective mean score of 3.87.

The level of ability to express ideas logically is tested through the presentation of a pictorial story. The evaluation criteria is adequate and inadequate. The result shows that 46% of the urban Primary school studentns have reached adequate level of ability to express ideas and 54% inadequate.

Of the semi-urban Primary school students, 14% have adequate level of ability to express ideas and 86% inadequate. The collective percentage of children with adequate ability is therefore 33.33%, while those with inadequate level of ability is 66.67%.

The result of the testing on the ability to reveal or manifest ideas logically, accurately and fluently shows that only 50% of the students have reach an adequate level of ability to build sentences containing certain wishes.

Meanwhile there are some students who still find it difficult to pronounce/spell certain phonemes; and to some extend there is a symptom which indicates that an intervention does occur by the mother tongue when students speaking the Indonesian

Language, and the Bugenese mother tongue has influenced the use of the Bahasa Indonesia by the majority of students of the semi urban schools.

The data on teaching facilities (for listening and speaking) has indicated that there are insufficient provision of text books for students as well as guide books for teacher. The same condition also occurs in terms of teaching aid, but fortunately the initiative undertaken by teachers to prepare their own teaching aid shows a high percentage (91.67). It is also necessary to note that the teachers guide books for the Indonesia Language are still inadequate.

Methodology

The method used in this research is decriptive method covering observation, interview, test and questionaire.

Findings, Conclusions, Recommendation

Based on the data analyses, the following use the results of the study. The "BahasaIndonesia" ability (listening and speaking) of the urban Primary School students is higher than that of the students of the semi-urban Schools. The resuit of this study also indicates many students inability to distinguish one phoneme from another. The students' power of retention as well as their ability to understand the message they had previously heard, that are in the forms of a question, statement and dialogue, is still low.
The finding also shows that the mother tongue tends to influence the students in speaking the "Bahasa Indonesia" such as the consonants (n) and (m) at the end of a word is often pronounced with (ng). Also the (sy) and (f) consonants are often pronounced with (s) and (p).

The provision of educational facilities is still insufficient in general, the teachers rarely undertake activities which may improve the students ability in Bahasa Indonesia.

It is recommended that efforts must be taken to increase the "Bahasa" ability of students with the Buginese mother tongue. To materialized the efforts, the provision of educational facilities, the improvement of teachers quality and other supporting elements to help increasing the quality of the "Bahasa Indonesia" teaching in particular and the education in general must be conducted seriously.

Writen by: Rusliansyah Anwar Date : August 4, 1986

Revised by: Dr. Moegiadi— Date : August 11, 1986

34. Title : **Teacher's Welfare: One of the Factors Affecting the Primary School Students Performance**

Total number of pages: 260
Text number of pages: 182

Researcher: TIRTARAHARJA, Umar

Type of document: Dissertation

Type of publication: Unpublished

Date: 1981
Place: Jakarta

Host institution/Publisher: The faculty of Post Graduate of IKIP Jakarta

Funding source: Personal

Keywords: Teacher's welfare, teacher's performance, student achievement, student performance.

Summary

The background of the study is the low quality of education as indicated by the low students achievement. This may cause great disadvantages to students development in particular and the society in general.

The researcher comes to the assumption that one of the influential factors relating to the low achievement of the primary school students is teacher's welfare. Students achievement is influenced by teacher's welfare.

The hypotheses proposed in the study were:

1) Teacher welfare gives significant influence on teacher's performance;

2) Teacher's welfare gives significant influences on teacher's performance;

3) Teacher's performance gives significant influences on students achievement;

4) Teacher's level of education gives significant influence on teacher's welfare;

5) Teacher's level of education gives significant influences on teacher's performance;

6) Teacher's work experience gives significant influence on teacher's performance;

7) Parents guidance gives significant influence on students achievement.

In this study, teacher's welfare is used as a predictor (independent variable) towards teacher's performance as a criterion (dependent variable). Further, teacher's performance is used as a predictor towards student's achievement as a criterion.

The outcome of the study indicates that: 1) teacher's welfare gives significant influence at 05 level of significance on teacher's performance; 2) teacher's performance gives significant influence at the 05 level of significant on students achievement; 3) at the 05 level of significance,

teacher's welfare gives significant influence on students achievement; 4) teacher's welfare, teacher's performance and students achievement are still far from unsatisfactory.

Methodology

The population comprised 139 teachers of the 6th grade and 8988 students of the same grade of the public and private Primary Schools. These students were registered to enroll in the school year of 1978/1979 in Ujung Pandang municipality, South Sulawesi Province. From the population 150 teachers and 1500 students are taken as sample.

The sampling method used was proportional/random sampling. Proportional sampling was used to determine classes of each district and random sampling was used to determine classes and sample unit of students of each class.

Data collecting was conducted by using: 1) Teacher and students questionaire; 2) Achievement tests in form subject areas namely: Indonesia Language, Mathematics, Science, and Social Sience; 3) Form on the diagnostic test.

Findings, Conclusions, Recommendations

Based on the data analysis, the following are the research findings and conclusions: 1) improving teacher's welfare can improve teacher's performance; 2) The higher the quality of teacher's performance, the better the students achievement would become; 3) Good teacher's performance influences students achievement positively; 4) The low students achievement is caused by the low teacher's performance and the latter is caused by low teacher's welfare; 5) The low quality of tea-

cher's performance is caused by low dedication of the teacher; 6) There is a connection between both work experience and the teacher's level education and teacher's performance; 7) Teacher's performance is hampered by teacher's welfare; 8) The effective influence of teacher's performance towards students achievement is not primarily determined by teacher's work experience and level of education, but it is determined by teacher's welfare; and 9) To some extent there is less parental involvement in school development and not enough attention to children development.

The conclusions are followed by recommendations:

1. efforts must be taken to improve teacher's welfare by the government as well as non government agencies.

2. To improve students achievement, it is necessary to increase teacher's welfare that certainly must be synchronized to the improvement of teacher's performance.

Written by: Rusliansyah Anwar Date : August 4, 1986
Revised by: Dr. Moegiadi Date : August 11, 1986

35. Title : The Effect of Methods of Teaching Skills: A Multiple Comparative Study

Total number of pages : 438
Text number of pages : 201

Researcher : WIDYA, Loes

Type of document : Thesis

Type of publication : Unpublished

Date : February 1984
Place : Bandung

Host institution/Publisher : Faculty of Post Graduate IKIP Bandung

Funding source : Personal

Keywords : Teaching methods, learning achievement, modular instructional system, comparative study

Summary

The objective of this research was to see how far the different types of lecture method affect learning achievements of Grade II Students of the Dress Making Stream of Consumer Education and Dress Making and Arrengement (SMKK) in the Special Territory of Jakarta.

This research was conducted by means of an experimentation using Grade II students of SMKK as the population, and Grade II students of SMKK in the Special Territory of Jakarta as the sample population.

ANNEX II

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