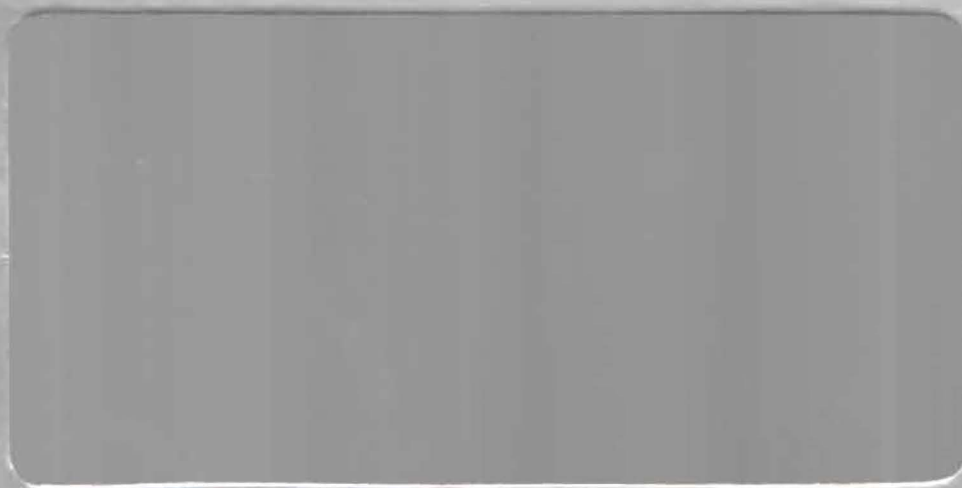**Departemen Pendidikan dan Kebudayaan**

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Child Development Workshop

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BACKGROUND CONTEXT FOR THE WORKSHOP

It has been the practice in Indonesia to review the school curriculum at regular intervals: the most recent reviews have taken place in 1967, 1975, 1984 and 1994. The curriculum covers all grades and all subjects for those grades and any new curriculum is put in place in all schools at a specified date.

The Curriculum Capacity Project, begun in 1997, is designed to support the process of curriculum development by developing the knowledge, skills and understanding of PUSKUR staff. The aim is that these enhanced skills and experiences will feed into the creation of a longer-term curriculum development process, on a regular 10-year cycle.

The first year of the CC Project (1997) concentrated on a range of areas for staff development, through four training workshops, clarifying key educational concepts, giving experience of qualitative research methodology for curriculum evaluation. The second year of the Project (current) aims to develop skills further under three headings:

- Curriculum Evaluation
- Curriculum Planning and Development
- Project Activities

This present short-term consultancy fits under the heading of 'Curriculum Planning and Development' and was two weeks in length. Its terms of reference were as follows:

<u>*Background*</u>   *Puskur staff need the skills and knowledge to develop the curriculum on solid foundations, both empirical and theoretical, to be able to defend the choices they make and answer criticism in a professional manner. The CCP project aims to empower the technical staff of Puskur by developing their knowledge and capabilities in the field of curriculum so that they are better prepared to meet the challenges noted above.*

In connection with this, several staff have requested that CCP activities include a workshop where their present knowledge of child development is extended. In addition, the relationship between child development and education in terms of cognitive, psychomotor and affective capability of children needs to be explored, particularly in relation to children at the TK and basic education levels (aged up to 15/16 years).

<u>*Objectives*</u>   • *Establish and extend knowledge of stages of child development – cognitive, psychomotor and affective – from 0-16 years;*
   • *discuss various theories of teaching and learning and relate these to development of children, including the following: behaviourism, Piaget, Bruner and Vygotsky;*
   a)   relate these to development of a curriculum which is: relevant to the needs of 95% of Indonesian children;
   b)   appropriate to their stage of cognitive and psycho-

> *motor development;*
> c)   *balanced for development of a well-rounded individual, i.e. not too academic.*

Tasks   *Incorporate above points into a workshop, with varying consultant input and participant discussions and other exercises.*

TIMETABLE

The workshop took place between September 6th and September 17th, 1999. The timetable was as follows.

Week 1

Day 1 Orientation meetings
2 School visits: primary and lower secondary
3 Opening of workshop: skills analysis of Puskur staff
4 Input, discussions and activities
5 Input, discussions and activities
6 Review and report writing (consultant)

Week 2

Day 1 Input, discussions and activities
2 Input, discussions and activities
3 Input and discussions (am). Assignment preparation (p.m.)
4 Preparation of written assignments by participant
5 Presentation of reports by participant. Wrap-up meeting with Puskur staff and British Consul.

INITIAL ANALYSIS OF BACKGROUND & PREVIOUS EXPERIENCE OF GROUP

On the first day, participants completed a brief questionnaire, seeking information about their previous teaching experience, attendance at any previous courses on child development, their views on the characteristics of 5-, 11- and 14-year-olds and their judgements about the most important influences on children in the course of their development.

The results were interesting: of the group present on the first day (some 14 in all), 8 had no experience of teaching in school at all and of those who had, all had taught older pupils in the upper secondary school. Four of the 14 said they had attended courses in the past with a child development aspect to them, mostly in the UK.

Their listings of the characteristics of children at various ages also proved informative, as the following summaries demonstrate.

5 YEAR-OLDS
The comments can be summarised as follows.

1.   Some comments very general and basic:
    * 'playing'
    * 'still crying'
    * 'fighting'

2.   Most respondents produced a more specific list of characteristics, such as:
    * 'curiosity'
    * 'asking questions'
    * 'exploring'
    * 'imitation'

3.   Some points clearly related to the curriculum are:
    * 'they can count up to 20'
    * 'they can write simple writing'
    * read text'

4.   Several people mentioned 'trial and error' (6 in all) which was not explained further but presumably implying a fairly random and unsystematic approach to problems and activities.

5.   The poorest listing (maybe because of language difficulty) was as follows:
        'playing, fighting and saying thank you and asking for pardon'

6.   The most detailed listing, however, showed a much more specific approach, from someone who had done a previous course:
    * curious
    * asking questions a lot
    * exploring environment
    * egocentric
    * like playing
    * trial and error

- experimenting
- imitation someone.

However, the listing from another member who had also already done a course in child development was, rather disappointing, namely:
- curious
- playing

In general, therefore, the listings of characteristics of five-year-olds shared very limited insight from most respondents, many of whom were parents themselves.

11 YEAR-OLDS

The descriptions of the characteristics of 11 year-olds were also general in nature and can be summarised as follows.

1. Again there were some <u>general</u> comments, the most obvious of which was the social characteristic of: 'making a group' or 'gang'.

2. Only one person gave any detailed comments:
   - make up collective stories
   - discuss problems to be faced and solutions
   - discuss activity plan to be carried out
   - making group.

3. The people who had already completed courses on child development were little different from the rest, for example:
   - disobedient
   - looking for a model
   - confident
   - sensitive
   - attracted to other sex (especially for girls).

4. Very few (3) showed differences from the listing for five-year-olds. For the rest, the two listings were either similar or different but so general in nature as not to imply any progression or development.

5. A typical listing for 11 year-olds is as follows:
   - confidence
   - sensitive
   - shy
   - make friend
   - explore with friend
   - play/game
   - experiment.

6. The emphasis in most was on social factors, such as friends, having 'idols', confidence and sharing. Very few mentioned cognitive or language factors.

14 YEAR-OLDS

The picture for 14-year-olds was very similar.

1. The comments for 14 year-olds were less detailed than for the other age-groups and were again mostly very general. A typical listing was:
    *   independent
    *   make friends
    *   no responsibility

2. One or two bucked this trend and gave a more detailed listing, such as:
    *   wants to play and learn everything
    *   can operate to calculate for all numbers
    *   can observe phenomenal material
    *   think critically
    *   start to like other sex.
    *

    This was not produced by someone who had done previous courses in child development.

3. Again, it was mostly social characteristics that were stressed: 'have an idol', 'self confidence', 'more independent', 'making friends', 'identity of self', 'going to the movies', 'responsibility'. There were very few references to cognitive aspects.

4. There was little to distinguish the comments about 14 year-olds from those for 11 year-olds.

FACTORS INFLUENCING CHILDREN'S DEVELOPMENT

The course members were asked, as the final question on the sheet, 'What do you think are the most important influences in making children and adults what they are?' Their responses can be summarised as follows.

1. The question asked for the <u>most important</u> influences, but most respondents listed virtually all possible influences, for example:

    *   parents
    *   family
    *   environment
    *   school
    *   friends
    *   TV and other media.

    In addition, some mentioned 'religion'.

2. One example of a more focused list was:
    *   education
    *   experiences in everyday life

3.　No mention was made of innate of inborn characteristics: the emphasis was very much on the influences of environmental factors. A similar trend was noted in the discussions in the first session, when they were asked to describe some of their major characteristics and to account for how they had emerged.

CONCLUSIONS REGARDING INITIAL KNOWLEDGE

This initial evaluation of the prior knowledge and existing ideas about child development by workshop members showed a very limited base from which to begin. Even those who had previously attended courses in child development seemed unable to consider these preliminary developmental questions in a detailed way. Their knowledge was very general and limited on these questions. This could have been the situation and relative lack of English, but I suspect that the content of the responses would have been fairly similar if Bahasa Indonesian had been used.

The one member who did respond in BI showed no greater insights into development.

The implications are:
- that even though some members had attended courses earlier, the starting points for the sessions would have to go back to the beginning in order to establish some basic developmental principles;
- for the need to link discussions of children's development both to their own experience of children (mostly as parents/family members, since few had taught in school) and to their own processing/development;
- that the workshop would also need to include some basic psychology in order to provide a framework for some of the ideas;
- that an emphasis would be needed throughout on classroom practice as an important part of their role as curriculum developers ;
- that it would be appropriate to begin by locating child development studies to their work on curriculum development in an explicit way in order to establish the part that such information could play in their professional role.

STRUCTURE OF THE SESSIONS - TOPICS COVERED

Model of curriculum
- Child development study and the curriculum
- A model of the curriculum: <u>intended, delivered, received</u>
- Basic principles for effective teaching and learning in schools
- Approaches to the study of children
- Heredity and environment in children's development
- The process of development: qualitative or quantitative change
- The importance of infancy research
- Research methods: strengths and limitations
- Physical development from birth to adolescence
- Behaviourism and child development
- Maturationist views of child development
- Piaget: a model of development and a critique: constructivist
- Vygotsky and Bruner: social constructions
- Information processing and child development
- The development of children's mathematical understanding
- Language development: first and second language

Teaching approaches
- lecture, discussion, activities, role-play, video

FEEDBACK QUESTIONNAIRES

After the first few sessions, a feedback questionnaire was completed, with the following questions and responses.

1. **What were mentioned as the <u>most useful</u> aspects of the workshop?**

    - Key principles for effective leaning and teaching
    - Models of the development process, especially Piaget and Vygotsky
    - Models of how we think
    - Mathematical understanding
    - The way the mind works
    - Information processing
    - Delivering the curriculum – principles
    - Analysing the curriculum
    - Model of memory system
    - Semantic networks
    - Language development in children.

2. **What were mentioned as the <u>least useful</u> aspects about the day/workshop?**

    Perhaps out of politeness, no negative aspects were mentioned.

3. **The suggestions as to how the running of the workshop could be improved were as follows:**

    - Content on workshop relationship with planning curriculum

- More application of theory through video
- Need more discussion of some questions
- Need more on science development
- Need for practical work to implement the theories to plan the curriculum (before the assignment part of the workshop).

Most aspects of the workshop, therefore, seem to have been well received, although it must be borne in mind that they were responding on a questionnaire. They were encouraged to respond anonymously and in BI if they preferred.

The suggestions for improvement were helpful and clearly seem to indicate the need for more discussion, video and thinking through examples to illustrate these new frameworks/ideas being met for the first time. With more time, this would indeed have helped to consolidate the ideas and to think about their application. In the absence of time, then it perhaps indicates the need for further work on these topics through such means as subsequent:

- guided reading;
- group discussions and seminars on specific topics
- use of video to extend ideas.

THE ASSIGNMENT TOPIC AND PARTICIPANT PRESENTATIONS

The second half of the second week of the workshop was focused on the preparation (mostly in pairs or in small groups) of a short presentation addressing the following three elements:

- a critical analysis of the present curriculum (according to their subject and age-phase) in the light of the information of child development;

- the production of a chart showing the major characteristics of children in their age-range, with a special focus on their own subject area;

- a further look at their on-going work on the 'minimum competencies' in order to evaluate the appropriateness of the current listing and to consider each entry in relation the classes 1-12.

The group worked hard on these questions and produced presentations of a fairly good quality. It was clear from their comments and analyses that their thinking had moved some considerable way in the course of the two weeks. However, what also became clear was that more time was needed to consolidate the ideas and to develop their application further.

THE FINAL FEEDBACK QUESTIONNAIRE

On the last day of the workshop, once the final presentations had been made, the participants were asked to fill in a final feedback questionnaire, rating various aspects of the workshop and seeking information about what had been most helpful. They were also asked to list topics where they felt they needed more input. The results were as follows:

The rating scale

They were asked to rate seven aspects of the sessions on a five-point scale, with 1 being the highest score ('excellent') and 5 the poorest score ('very poor'). The mean scores and ranges for each aspect are listed below.

Aspect	Mean score	Range of scores
Quality of the room	2.6	2-4
The general arrangements	2.5	2-3
Timing	2.8	2-4
Projector/ slide visibility	4.2	3-5
Handouts	2.2	1-4
Teaching quality	1.3	1-2
Support offered	2.7	2-4

It is clear from this summary that most of these aspects received an 'average' rating on the 5-point scale. However, the exceptions to this were the very poor rating of the quality of the projector and the high rating of the quality of the teaching. This was reassuring.

As in the earlier feedback questionnaire, the aspects of the workshop cited as the most useful and positive can be summarised as follows:

- a view of child development as a whole process
- clarity of explanation
- handouts useful and helpful
- knowledge of how to plan the curriculum based on child development
- knowing the technical words
- key principles for effective teaching and learning
- Piagetian theory
- teaching quality
- knowledge of methodologies
- the teacher and teaching style
- the materials presented
- interaction between the teacher and the group
- planning and preparation was excellent

The 'least satisfactory aspects of the workshop were as follows, although most respondents wrote nothing under this question:

- the participants were not very disciplined (attendance and time-keeping?)
- understanding of the language

- not enough breaks
- need more time for some topics such as moral development

The final question asked for any other comments and for other topics they thought they would have liked more input on. The listing was as follows:

- the idea of 'basic competencies'
- the need for more English language courses
- not enough time to take things to any real depth
- the teacher should speak Bahasa Indonesia

These comments essentially confirmed the messages from the earlier questionnaire and added some further dimensions, viewed from the perspective of the end of the course.

CONCLUSIONS AND RECOMMENDATIONS

1. The preliminary visits to schools in Jakarta, arranged by Dr Sweeting, were extremely useful and served to orient me to particular issues that could be discussed during the sessions. This is a practice to be commended and repeated for other visitors, if they have little direct experience of the education system in Indonesia.

2. Summarising many of the points already made in this report, what is clear is that the workshop was well received by the participants and they, in general, appeared to have gained both information and insights from the materials and discussions. To the extent that this occurred, then the objectives for the two weeks were met.

3. The language issue, however, was indeed a real one: translation systems were set up within the group so that those who were quite fluent speakers of English translated at regular intervals. The other speakers of English also maintained a check on these on-going translations, acting as an internal verification system.

4. The model of the curriculum set out in the first session (the curriculum as intended, the curriculum as delivered and the curriculum as received) proved a useful organising device and provided the context for the ideas and materials in the subsequent sessions.

5. As the comments from the initial 'state of knowledge' questionnaire showed, the previous experience of members of the group was very diverse and this, of itself, could have presented major problems in a context of a single workshop structure. The problem could only be addressed by initially setting out the basic concepts but allowing discussions to range further for those who could deal with more complex ideas. Under some circumstances, this diversity of background could have become almost impossible to overcome and this should perhaps be acknowledged in further workshops and courses.

6. Over the course of the two weeks, a number of 'core' members of the group attended with reasonable regularity. Others, however, came and went in a rather unpredictable way between and even during the sessions. This made continuity of discussion very difficult. It would be helpful in any future courses if this could be regularised.

7. The final presentations from group members showed that many of them had learned new ideas and perspectives from the sessions. However, many of these were rather tentative and partial, suggesting the urgent need for some further consolidation of the materials and the more difficult ideas. This could be achieved by the organisation, internally, of further discussion groups and seminars, perhaps with subject-specific focus points, and guided reading. Video-tapes and photocopied articles have been lodged with Dr Sweeting and these could act as starting points for discussion.

8. It rapidly became clear that most group members had no experience of systematic child study, certainly not from their earlier courses. I am sure that their knowledge would be further increased and consolidated if they carried out child observation studies, including 'clinical interviews' with the selected pupils of different ages. Alternately, they could each 'shadow' a child in school for a day and talk to them (the pupils) about the experience. Both of these would have to be carefully structured, however, with clear focus points and clear questions to be answered. In a situation where many of these colleagues have little

experience of teaching or children, this would provide an important, 'concrete' experience which could be used as the basis for subsequent seminars or discussions.

9. Part of the emphasis throughout the workshop was on teaching and learning strategies, seen in relation to the characteristics of children at different points in their development. Since many of the participants had no direct experience of planning lessons or teaching in school, this was an important dimension to stress in the sessions. In my opinion, it should also be an important aspect of the final new Curriculum Document, when it is produced. Without such guidance (rationales, ideas for teaching activities, some sample lessons) it is hard to see how ordinary teachers in Indonesian classrooms can begin to interpret the curriculum or improve their own practice.

Summary Charts showing
Major Characteristics of Children's Development

Summary charts for three age-ranges (pre-school, early/middle childhood and adolescence) showing some of the major characteristics of children in various aspects of their development

	Physical/Motor	Cognitive	Verbal (first language)	Social and Moral
Pre-School (3 to 5/6)	• walking and locomotion well established • gross and fine motor skills becoming more skilled and focused • control over bladder and bowels • rapid increase in strength for boys and girls • length of limbs disproportionate to body • balance improving, as is physical control and co-ordination • gradual development of skills such as throwing a ball and catching • very active but energy in short bursts • enjoy rhythm, movement and singing • some gender differences in physical skills, eg throwing balls.	• early concepts and schema established in infancy, based on characteristics such as visual appearance (colour, size, texture) and functions • Piagetian stages of SENSORI-MOTOR development and PRE-OPERATIONAL stage • simple problem solving, but can only see and understand limited aspects of any situation or problem • play becoming more complex, imaginative and varied • can make simple classifications and categorisations of objects or events • can set goals and achieve them • some evidence of egocentrism in thinking • confuse appearance and reality • cultural influences on cognition and development, as well as individual differences	• period of extremely rapid growth in language • rapidly increasing vocabulary (with appropriate stimulation) • can refer to 'self' ('I' or 'me') after age of 18 months to 2 years • language is one aspect of wider symbolic development (others include drawing imaginative play etc) • length of utterance gradually increases, with increasingly complex use of different types of sentence structure • developing conversational abilities, eg turn-taking, topic extension, questioning • gradual increase in capacity to take account of the needs of the listener • language becoming an important tool in thinking • many individual differences	• predisposed to respond to 'social' stimuli and people from birth • capacity to interact with others from earliest stages • strong relationships established with care-givers and other adults and children, and effects of separation more marked • gradual extension of range of social relationships within and outside the family • still a strong need for attachment and security • early sense of self and self-concept; recognition of self in a mirror (2 years) • moral ideas imposed from the outside and the intentions of others not taken into account • socialisation into a wider range of social roles and relationships • gender roles becoming established • ethnic identity after age of approximately 4.

Early/Middle Childhood (6-11)				
	• often a period of fairly stable growth, but limbs still growing faster	• significant new development during this period, according to Piaget	• basic language structures (sentence types) now in place	• increasing move into wider social relationships and less time spent in the family context
	• gender differences in growth rates, especially towards end of this period	• performance on his famous 'conservation' experiments now shows insights into nature of number, mass, volume etc	• continuation of vocabulary development, including the use and understanding of more abstract terms	• can think about how others perceive them
	• well developed balance, control and co-ordination	• CONCRETE OPERATIONAL stage in Piaget's theory, when 'mental actions' can be carried out and there are signs of thinking in more logical ways. less egocentrism in thinking	• can communicate more effectively about objects, bearing in mind the needs of the listener	• can begin to understand that people can feel one way but behave in another
	• increase in strength and endurance		• there are still some types of sentences that are difficult and will develop later	• increasingly can take other peoples intentions into account and believe that the punishment should fit the crime
	• adventurous spirit	• becoming more skilled in problem solving and reasoning – more 'expert'	• can participate in conversations in a more sophisticated way, developing their ideas, discussing, explaining	• more time spent in the company of peers
	• further refinement of fine motor skills	• can order and classify in increasingly complex ways	• can communicate in a wider range of social contexts and begin to develop appropriate 'linguistic registers' for different people and situations	• begin to understand the difference between moral rules and social conventions
	• good hand-eye co-ordination	• can think and organise information in more strategic ways, becoming faster and more accurate, but schooling has a major effect on this development	• move to literacy (reading and writing) and the mastery of new symbol systems	• moral reasoning increasingly based on idea of mutual responsibility and support
	• further sex differences in performance towards the end of this period	• literacy development affects wider cognitive development	• literacy development (both reading and writing) reflect back on spoken language abilities	• importance of 'fairness'
	• towards the end of this period, the beginnings of the pre-adolescent changes in shoulder-hip ratio, with implications for motor development and skills	• extensive influence of culture and social expectations on cognition	• strong influence of social background on language and literacy development	• friendships become more varied and significant
			• language and thinking closely linked	• strong sense of self and the need for self-esteem

Adolescence (11 plus)				
• adolescent growth spurt and changes in body fat ratio • development of secondary sex characteristics in girls and boys due to hormonal changes • shoulder-hip radio changes alter centre of gravity for boys and girls • rapid gain in strength in boys • stability in development of balance, and co-ordination • longer limb growth in boys • interest in sport etc and physical activities • competitive spirit in sport	• thinking becomes even more 'expert' and skilled • thought can increasingly be about possibilities, hypothesis testing, planning ahead and thinking about thinking itself • Piaget's FORMAL OPERATIONAL stage, of reasoning and systematic problem-solving • large social and cultural differences in the ability to think in these abstract ways • critiques of Piaget stress that many adults never use such formal, logical reasoning	• increasingly sophisticated use of language (literacy) • close involvement of language in the development of more abstract thinking • ever-wider social roles and relationships demand different communicative styles and registers • increasing appreciation of literature, poetry etc.	• friendships become of increasing importance and the peer group takes on considerable significance • family may have less influence but the media more • increasing understanding of social and political issues • moral reasoning also becomes broader, so that a wide range of factors can be used to judge a moral problem • opposite sex relationships developing • self esteem may decline during adolescence • adolescents describe themselves and their characteristics in more varied ways • search for identity in social, gender and ethnic terms	