STIMULUS PICTURES FOR LANGUAGE DEVELOPMENT

*C.D. Metcalfe

Stimulus pictures can be either one of the most valuable or one of the most misused of teaching aids. If they are simply displayed for an indefinite period around the classroom walls as decoration, they will quickly become valueless. However, an imaginative teacher should find relevant study prints of value over a wide range of teaching methods and subject areas.

In compiling notes on the use of the set of pictures produced by this Branch, a number of guiding principles were followed. The notes are simply an introduction, not a comprehensive course. Each teacher, each class and each situation will cause the use of the pictures to vary, making it impossible to produce detailed courses with general applicability. Even if such a prescriptive course were possible, we would consider it highly undesirable. The value of the prints will be enhanced to the degree to which they are used creatively, according to the needs of the particular situation.

The notes will seek to present more of a generalised framework to assist teachers in developing their own methods of utilising the pictures. Various ways of using study prints will be listed and types of questioning and interaction strategies discussed.

BACKGROUND INFORMATION

The set is of 30 colour prints (20" x 16"-boxed) in most cases of contemporary Aboriginal communities. Sets are available at $10.00 from the Aboriginal Education Branch, 30 Ord Street, West Perth, W.A.

It was not possible to have numbers printed on the pictures, but a number reference is essential in listing, categorising and discussing the set.

The following is a numbered list of the pictures in topic groups. The location of the picture is also given.

Dr C.D. Metcalfe, Senior Education Officer, Aboriginal Education Branch, W.A. Education Department.
Before proceeding, if you have a set of pictures, would you sort out and number them according to this list. Numbers could be written on the back of the prints with a felt pen.

I. LEISURE-TIME

A. Pre-School

1. Toothbrush drill - Oenpelli, N.T.
2. Pre-school on the beach - Maningrida, N.T.
3. Cowboy line-up - Port Keats, N.T.
4. Wagon ride - Bamyili, N.T.
5. Water play - Oenpelli, N.T.
6. Refreshment time - Kununurra, W.A.

B. Primary

7. Girls on fence watching horsemen - Oenpelli, N.T.
8. Boy and Older man by the river - Walgett, North Central N.S.W.
9. Children on playground equipment - Kununurra, W.A.
10. Children playing around calf and pig - Yandeyarra Station, W.A.

C. Young People

11. Miniature Rodeo - Roper River, N.T.
12. Solitary fisherman with spear - Kimberley, W.A.
13. Campfire cooking in creek bed - Areyonga, N.T.

D. Adult

14. Men at Jigalong - W.A.

II. SPECIAL OCCASIONS

15. Party time - Mount Margaret, W.A.
16. The Pearl Festival Procession - Broome, W.A.
17. Fire-making competition - Yuendumu, N.T.
III. TRANSPORT

18. Air transport (helicopter) - Kununurra, W.A.
19. Sea transport (wharf scene) - Wyndham, W.A.
20. Road transport I (vehicles stalled on flooded crossing) - Fortescue River, W.A.
21. Road transport II (bridge over Fortescue River) - W.A.
22. Road transport III (road 'train' crossing Kununurra diversion dam) - W.A.

IV. CITY VISIT

23. Aerial view of Perth, W.A.
24. The Beach (Mount Margaret children at Perth beach) - W.A.
25. The Supermarket - Perth, W.A.
26. The Fire Station - Perth, W.A.

V. COMMUNITY SERVICES

27. Fire truck - Kununurra, W.A.
28. Hospital cleaner - Walgett, N.S.W.
29. School aide (medical) - Walgett, N.S.W.
30. Hospital visitors - Darwin, N.T.

QUESTIONING AND INTERACTION STRATEGIES

There appear to be very few attempts to provide teachers with practical guides to questioning and interaction strategies using study prints. These notes will at least provide an introductory framework which will suggest extensions of the application of stimulus pictures into vital but at times neglected areas. The set of Stimulus Pictures for Language Development will be used to illustrate interaction strategies which may assist in the development of the children's oral and written language, basic skills, concept formation, logical processes and emotive expression.

1. CONTENT

1.1 Description

Very little will be suggested under this heading as the description of content is the most evident and straightforward area of
interaction techniques. However, this fact allows for greater flexibility in the framework of the teaching situation. The teacher should not always be the focus and guide of the learning process -

- the descriptive session should be centred on the children's reactions and self-expression;
- children should be given the opportunity in pairs or small groups to talk without inhibition about pictures which interest them;
- teacher aides or older children "borrowed" from upper primary or secondary grades could guide the descriptive sessions. However, the class teacher should carry through a mini training program with the aides and older children instructing and extending them in further questioning techniques.

Many well-known games can be played for reinforcement and enjoyment based on the content of the pictures -

- "I spy".
- "Yes-no". A child chooses object from picture or pictures. The rest of the class ask questions about it. The child may only respond with "yes" or "no" until the object has been guessed.
- "Clue - 0". A child gives two or three clues as to the nature of the object, and the class guesses the object.
- "Hang-the-man", using objects in the pictures.

1.2 Labelling and Listing

The simplest method of writing about the content of a print is to either label its components or list them. This activity can, as we shall see, be extended into areas of categorisation and further into special categories such as parts of speech.

These are some labelling techniques:

- The picture is placed on the sill of a blackboard and the teacher writes the content words on the board around the picture.
A simple frame can be made, using thick card and heavy transparent plastic sheeting. The card and plastic should be cut a little longer than the pictures and then stapled, with a reinforcing strip, along one of the longer sides.

Pictures can then be placed between the card and the plastic and activities carried out on the plastic, using washable pens or crayons.

Key words could be pre-prepared on cards. Children could, as a follow-up activity, take the card and place it on the correct referrent in the print.

1.3 Oral Sentence Patterning

The pictures can be used to present sentence pattern frames for oral language development.

These methods of content discussion are illustrated in the following section which was prepared by Ms Anne Cameron.

1. **AIM:** To create in children the confidence and willingness to speak about a topic or picture.

   a) General discussion about a picture dominated by child talk rather than teacher talk.

   b) The teacher aide may take a group for discussion in the vernacular.
2. **AIM:** To build an English vocabulary.

   a) .. Talk about the picture (No.10) and its detail ... introduce the English words for each object, for example, truck  girl  boy  calf  pig  camp  tree .. Limit the number of words at first. .. Print the words clearly and pin on (or near) picture.

   ![Diagram with objects: truck, camp, tree, girl, boy, pig, calf]

   b) Build up sentences about the pictures, for example, using picture No.4.

   *The girl is pushing*

   *Two girls are in the wagon*

   Use in conjunction with 'Breakthrough Approach'(Picture 18)

   *The man is fixing the helicopter.*

   *Another man is helping him.*

   (can be words or phrases)

   c) Build up sets of action words, for example (Picture 2)

   walking  crawling  pointing  scratching  digging etc.
d) Colour words, for example, (Picture 27)

May later extend, for example - red engine, etc.

e) Any other group of words such as - name words (nouns),
   adjectives
   number words

3. Use in developing patterns of standard English speech, for example, Question - Answer : (Picture 20)

   Where is the truck? The truck is in the water.
   Where are the men? The men are in the water.

4. Use incidentally as the occasion arises, for example:

   a) A child comes to school and talks about fishing -
      children appear interested. Select the two related
      pictures and discuss different ways of fishing, where
      fish live etc. (Pictures 8 and 12).

   b) A helicopter comes to town. Have discussion about the
      helicopter in the picture - compare the one in town.
      Build up sentences about it. Take polaroid photos of it.
      Build up story books. (Picture 18).

5. Use in conjunction with social studies, health, music, songs,
   rhymes, stories, etc.

   What's in the picture?

   With stimulus pictures rich in details, it is possible to organize an observation game very similar to Kim's (Memory) Game.
Take a picture, expose it to view for a minute or so, then place it face down and ask the group to say what they observed in the picture. If possible have them do so within a sentence pattern which has already been taught.

Question and Answer Game

Place the picture in such a way that the group can see the detail. Use names of items in the picture as call-words. When you call out one of these names it is the signal for a member of the questioning team to ask his opposite member a question on it.

For example - Teacher says, "Yellow truck." (Picture 20)

A1. "Where's the yellow truck?"
B1. "It's in the water."
A2. "How did it get there?"
B2. "It is bogged in the water."

Far too often the use of stimulus pictures is restricted largely to the content aspects.

The following sections headed - Interpretation, Extension, Affective Reaction and Language Development are presented to assist teachers to lead children beyond this descriptive level.

2. INTERPRETATION

2.1 Categorisation

We have already introduced this area as a refinement of content description.

There are many common elements which can be used as bases for the formation of categories, for example:

i. List categories under the headings people, animals and things in picture 10.
People
- girl
- boy
- man
- woman

Animals
- pig
- calf

Things
- house
- truck
- tree
- fence
- hose etc.

Concepts of animate/inanimate could be drawn out from this analysis.

ii. List objects under the headings *Things I can eat* and *Things I can't eat* in Picture 15:

| Can Eat         | Can't Eat                  |
|-----------------|----------------------------|
| sandwiches      | table                      |
| cake            | hats                       |
| lollies         | Mrs Jackson (at head of table) etc. |

2.2 Deduction/Induction

The development of deductive and inductive reasoning processes is generally impaired in Aboriginal children because of environmental factors. Thoughtful use of study prints can provide opportunities for this development.

Take, for example, picture 8, the 'boy and older man by the river'. The following imaginary discussion illustrates this kind of development.

Teacher: "Do you think the boy and man could be related?"

Child: "The man could be the boy's father."

Teacher: "That might be true. Look at the man's hair. What colour do you think it is?"

Child: "Grey."

Teacher: "Do you think he is a young man?..... Why?"
Child: "He might be the boy's grandfather."

Teacher: "Good. We don't really know, but grandfathers and fathers and sometimes uncles often show children how to do things. Could anyone tell the class about something their father or grandfather or uncle has done with them?"

Class Response: ____________________________

Teacher: "What do you think is in the bag?"

Children may respond with a number of alternatives. 'Correct' answer unknown.

Teacher: "What do you think the boy and the man are doing, then?"

Child: I think that they are fishing, because they have a bag. And I think I can see a fishing line winder on the ground in front of the boy."

Teacher: "Yes, they may be fishing. But I want you to look very closely at the picture to look for clues about something else they are doing."

Child: "There's a kind of net on the grass."

Another child:

"And there are two sticks in the ground. What are they for?"

If the other children cannot provide answers, the teacher should lead the class to see that the boy and the man are also trying to catch *gilgies* (yabbies, a crustacean similar to marron). The two sticks (probably a third largely hidden behind the man's leg) have a string attached. A piece of meat is tied to the other end and put into the river. When *gilgies* are attracted to the meat, the scoop net is used to capture them.

The exercise of deductive/inductive reasoning should be evident from this conversation which, though manufactured, was based upon actual responses to the picture.
2.3 Dramatisation

Children should be given opportunities to act out situations in, or suggested by the pictures. For example, reinforcement of the lesson based on picture 9 could be achieved through a miming game:

- miming of either the verbs or prepositions embodied in the picture. One child mimes, others guess;
- miming of actions not necessarily found in the print;
- miming sequences of actions, for example, climbing up the ladder and then sliding down the slide;
- it may be possible to extend the miming technique into a mini-system of sign language similar to the T.V. mime shows, for example, a hand to one's ear means, "the wanted word sounds like..."

Picture 27 could be discussed and the children assisted to develop a very simple plot with spontaneous dialogue. For example:

Act 1: The Alarm - acting out a telephone conversation, giving details of the fire.

Act 2: The Drive - calling members of the brigade, mounting the fire truck and driving to the scene.

Act 3: Putting out the Fire - use of equipment, satisfaction at success, etc.

3. EXTENSION

The pictures can be utilised to extend the children into a number of areas. Again, Aboriginal children generally lack opportunities for such extension in their early environment, and these areas are vital to their general development.

3.1 Temporal Relations

Traditional Aboriginal conceptions of time are on quite a different plane from European concepts. For instance, the Bardi Aboriginal sense of time relationships is far closer to the Hebrew concepts of perfect/imperfect than the Western European linear system of past/present/future.
Temporal relations can be embodied, for instance, in a dramatic representation of an incident.

Take Picture 20. Have the children reconstruct what went on before the truck stalled. Talk about the predicament. Then have the children suggest ways in which the problem could be overcome - the after aspect. The children could then act out the sequence of events.

The rodeo scene (Picture 11) could be used in this way. Talk about the events leading up to the ride, the fall and the aftermath.

The class could illustrate the before and after aspects of the story. Each child could do a series, comic-style, or groups of children could work together on larger sheets of paper and the sequence put together as a wall display. The actual print could be included as part of the sequence.

3.2 Spatial Relations

Relations in space can be illustrated through picture discussion. The child's ability to appreciate the apparent diminishing in size of more distant objects is a test used to indicate development in the areas of perceptual constancy and spatial relations.

Picture 7 illustrates rather dramatically the effect of distance and perspective. Ask the children -

"Which is bigger, a girl or a horse?"

"Which is bigger, a girl or a tractor?"

"Which is bigger, a girl or a shed?"

Have the children measure the nearest girl to the left of the picture. The measurement need not be in any units (cm or inches) but could be simply marked on a piece of paper.

Now let the children measure the horses, the tractor and the shed in the background:

"Which is bigger in the picture, the girl or the horses, shed and tractor?"

"Is the horse bigger than the shed?"
To follow up the lesson, which could become rather confusing to young children, the class could be taken outside and the phenomenon further demonstrated. e.g. Pick a tall child and a short child and have them stand together. Ask who is taller. Have the tall child move away from the group, stopping at various intervals. Have the children take a rough measurement of comparative heights to arrive at the generalisation that the further away an object stands, the smaller it appears.

Another picture which can be used to develop spatial relations is the aerial view of Perth (No.23) There is a fascination in following through various routes along the freeway complex. The children will need assistance to understand such things as keeping to the left of roads.

Take Picture 20, the stalled vehicles. To quote the Main Roads Department brochure, the "North-West Coastal Highway", -

In the 1960's crossing a stream meant the motorist had to remove the fan belt from his vehicle and cover the motor with a bag to keep out the water. The fan belt was replaced at the other side of the stream after removal of the bag. (A canvas or waterproof bag or sheet was generally used.)

The teacher could pass on this information to the class and then ask them to think of reasons for the precautions.

"Why cover the motor with the canvas bag?"

"Why remove the fan-belt?" (Answer: To stop the fan from throwing water over the electrical system of the motor).

An even more complex set of logical relations could be developed on the basis of the TRANSPORT series of prints, numbers 18 to 22.

- Have the class discuss in general the different modes of travel - air, sea or land.

- Choose a long distance route to be travelled. This could be from the children's own town or community to another locality (e.g. Fitzroy Crossing to Darwin for Fitzroy children) or any two centres (e.g. Kununurra to Broome).
Ask the children to say which mode of transport they would choose to make the journey - car, truck, bus, light aircraft, commercial aircraft, helicopter, ship, smaller boat - and, most importantly, why?

List the various answers to the "why" responses as a set of variables and have the class reconsider their choices.

| Time Taken | Cost  | Interest | Comfort    |
|------------|-------|----------|------------|
| Air        | short | high     | little     | very good  |
| Land       | long  | low      | much       | poor       |
| Sea        | long  | medium   | some       | good       |

3.4 Prediction

A further extension of the temporal sphere is to have the children predict what might happen in a particular picture.

Take Picture 5, for instance. The non-Aboriginal boy is just about to "cop" a dish full of water thrown by the boy on the left.

The class could be asked, "What do you think will happen next?"

In Picture 20, the question could be put, "What will the driver do now to get his truck out of the river?"

Referring to Picture 12, the boy with the fishing spear, the teacher could pose the question, "What do you think the boy would do if a large shark swam by just below him?"

In the right background of Picture 18, a light aircraft is being refuelled and a lady passenger is waiting beside it. The class could be asked, "What is likely to happen soon in the picture?"

With prediction-type questions, of course, there is no one "right" answer and the wider the range of viable alternatives offered, the better.
4. AFFECTIVE REACTION

The emotional component in a learning situation is at times neglected, considering that motivation is very dependent upon feeling. The children should be encouraged to express freely how the content of a picture affects them and to become as far as possible a part of the situation portrayed.

4.1 Emotional content

- A simple method of inducing comments in the affective realm would be to ask, after a number of pictures had been talked about, which pictures the children liked the best and which they liked the least. Then try to probe the *why* of the reaction.

- Have children suggest the emotional reaction of people in the pictures:

  "How do you think the man feels in the stalled truck?" (Picture 20).

  "How would the boy feel as he starts to fall off the bullock?" (Picture 11).

- Picture 24 shows a group of Mount Margaret children who are seeing the ocean for the first time in their lives. "How do you think they would feel?"

- Presents and a party are the centre of Pictures 3 and 15. "What would be the feelings of the children?"

4.2 Identification

As an extension of the emotive content of the pictures, children should be encouraged to identify as closely as possible with the people and situations portrayed.

Referring to the "hospital visitors", Print No.30, the class could be led into an imaginary reconstruction of the events leading up to the hospitalization.

"What do you think could be the matter with the girl? How do you think it happened? How would you feel if you were rushed into a strange hospital? Who has had a similar experience? How would her friends feel when she was taken to hospital? Talk about her
feelings at the arrival of her visitors.

Print 23, the aerial view of Perth, has caused more comment from Aboriginal children than almost any other print. Firstly, there is the overwhelming effect of the masses of houses, buildings, cars, roads and water. Secondly, it is surprising how many children have visited Perth. They show great excitement in identifying with the print as they recognise features and landmarks (Kings Park, the Narrows Bridge) and trace their way around parts of the city they visited.

One picture with which the children will happily identify is Number 25, The City Supermarket. They could be invited to "put themselves in the picture." Frames to assist response could be suggested, for example, "I'd like to buy some ..........(lollies, potato chips, etc.)"

4.3 Expressive and poetic language.

The prints could provide stimulus in the areas of poetic creation and expressive language.

Take the air transport print, Number 18, for instance. The children could be asked to think of the places or people they would like most to visit. An introductory frame could be suggested, such as, "If I owned a helicopter, I would ..........(fly to Darwin, Perth ......visit my family.... take all my friends for a ride)."

The children could then draw themselves in the helicopter doing their desired activity.

A simple method of providing material for poetic expression is to list actions or objects in a print and have the children "play about" with the words. For example: Picture 9, The Playground.

running around	climbing up	 sitting down
riding a bike	 hanging down	 on a friend's back
sliding down	 it's fun to play in our playground.

5. LANGUAGE DEVELOPMENT

Though a structured application of stimulus pictures is not recommended as a general practice, there may be occasions when a more formal approach to language development is appropriate. We would strongly recommend "language experience" strategies, but in situations
where the children do not speak English as their first language, greater teacher guidance is necessary in language development.

5.1 Parts of speech

Labelling and listing techniques have been discussed (Section 1.2). Often lists of words fall into categories such as verbs, where actions are listed, and nouns, where objects are listed. Whether the lists are called "verbs" and "nouns" or "doing" words and "things" will depend upon the teacher. Take for example, Picture 9 - the playground scene.

The print is designed to introduce prepositions and verbs. These parts of speech are interrelated because prepositional phrases are generally adverbial. Aboriginal children frequently have difficulties with prepositions. This is often related to differences between the structures of English and Aboriginal languages. The equivalent to English prepositions is, in most cases, a postpositional suffix, for example ngurra-ku in Ngaanyatjarra would mean "to the camp", where -ku means "to". Another difference in languages is that Aboriginal suffixes may not coincide exactly with English prepositions. Thus, the prepositions "to" and "for" are often expressed by the one Aboriginal suffix.

Looking at the picture, then, a teacher could initially ask for different types of actions, that is, verbs. Responses could be set within a frame suggested by the teacher. For example:

There's a girl **climbing**. There's a boy **riding**.
There's a girl **sliding**. There's a boy **sitting**.
There's a boy **hanging down**. There's a girl **standing**.
There's a boy **walking**. There's a boy **running**.

There's a boy **riding pick-a-back**.

However, these sentences sound incomplete. In most cases, words can be added to tell us where or how the action is being done. The children could then work through the actions and be encouraged to add adverbial phrases. Of course, the terms verb and preposition need not be introduced, depending upon the level of the class and the purpose and approach of the teacher to language development. For example:
There's a girl climbing up the slide.
There's a girl riding on the bike.
There's a girl hanging down from the bar.
There's a girl standing under the slide.

5.2 Core vocabulary cards

The prints can be used as the stimulus for the use of sets of basic vocabulary.

The Western Australian Aboriginal Education Branch has produced sets of core vocabulary cards similar to Breakthrough to Literacy materials. There are teacher's sentence building cards and children's sets of cards. The core vocabulary is based on a Northern Territory list of some 190 words or word parts most commonly used by Aboriginal children. The pupils' words are printed on playing cards which can be overlapped for sentence building. The cards are more durable and easy to handle than Breakthrough words, and can be used to play an almost unlimited number of card games. Flexibility and motivation are maintained by the use of blank cards onto which can be written additional words which the children use in their sentences.

Sentences suggested by the children can be "built" with the teacher's or pupil's cards and then transferred into class or individual "reading" books.

5.3 Sentence patterns

Stimulus pictures can be used to motivate a wide variety of techniques which can assist children in oral and written expression.

Examples will not be listed here as teachers will find a most valuable and comprehensive source of ideas in the Source Book of Language Methods, (Aboriginal Education Branch, Education Department of Western Australia, Perth, 1976) compiled by Elizabeth Coghill, particularly Section C.