

## INFORMAL LEARNING STRATEGIES IN SOLOMON ISLANDS

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### **Preface**

*The kinds of research on which this article is based, exemplified particularly by the work of Harris (1984) and Christie (1985), have come under substantial criticism in recent years. It is therefore appropriate, at the time of the reprinting of this article, to review some of this criticism as a means of creating a framework for evaluating the usefulness and limitations of the approach used in the research. Much of the criticism has been derived from post-colonial theory, and it is therefore especially pertinent for readers in Pacific island nations. The criticisms can be grouped into several main areas: (i) the problem of the authority to speak (ii) the problem of constructing the 'other' (iii) the problem of essentialising (iv) the problem of authenticity, and (v) the problem of inverting hierarchies of knowledge.*

*The problem of the authority to speak refers to the question of the extent to which westerners such as myself can or should attempt to describe and analyse non-western societies, especially those societies which are or have been subject to economic, political, ideological or educational colonisation. Gandhi (1998) argues that this question was most pertinently asked by Gayatri Spivak (1985 cited in Gandhi 1998: 1) who enquired whether it was possible for colonised peoples (subalterns) to speak and represent themselves. This then raised the question of "how can the investigator avoid the inevitable risk of presenting herself as an authoritative representative of subaltern consciousness?" (Gandhi 1998: 2). As Gandhi rightly points out, this is a question which continues to trouble researchers in a wide range of fields. Readers therefore should feel quite free to question the findings which I present in the following article, to compare them with their own contexts and with their own understanding of social reality in general and the nature of informal learning in particular.*

*The second problem relates to the idea of constructing the 'other', so forcefully developed initially by Edward Said (1978). One of Said's major points was that through their study of non-westerners, westerners have actually engaged in a process of constructing an identity for non-western groups (the 'other'), generally without much, if any, consultation or collaboration with these 'others'. Furthermore, this 'other' is constructed as diametrically opposite to the west: whereas the west is represented as "civilised" but "mundane", the east is represented as "primitive" and "exotic". Commonalities between humans are downplayed; difference is emphasised and exaggerated. This criticism has been particularly levelled at the work of Harris (1984) and his use of binary comparisons of Indigenous and European culture in Australia (see McConaghy 1997, 1998). In this article, therefore, readers should ask themselves to what extent is it an inadequate or inappropriate exercise in constructing an identity for a group of 'others', and to what extent does this construction downplay human commonalities and individual identities, and emphasise differences to the extent that it sets up misleading and inaccurate binaries?*

*The third problem is directly related to the first two. The kinds of identities which the use of binaries encapsulates tend to be homogeneous. As a result, they tend to be constructions of some "essential" characteristics of particular cultural groups (Gandhi 1998: 76). As well as excluding people from the process of constructing their own identities, these essentialisms mask diversity within groups. Furthermore, they can easily develop into stereotypes which are then used in educational contexts to limit the range of learning experiences provided for students (McConaghy 1998). It should also be remembered, however, that at times it may be strategically useful for educators to temporarily adopt essentialist positions while at the same time "remaining vigilant about our own practice" (Spivak 1990: 11) in order to achieve a wider goal. In the following article, then, it is important for the reader to ask to what extent the research constructs some notion of the essential Solomon Islands learner, and to what extent does this construction mask the diversity within Melanesian groups. Furthermore, readers could also usefully ask how this research can be used strategically to empower students through enhancing*

*student learning and students' skills, and how it is possible to avoid using it to limit or disempower students.*

*The fourth problem is related to the third one. Constructing a notion of the essential 'other' not only masks diversity, it also constructs notions of authenticity. Individuals who appear to conform to the outsiders' construction of the essential type are authentic, whereas individuals whose identities do not conform to that type in some way are constructed as unauthentic. This type of problem often arises through the use of notions of traditionality. Indigenous people living 'traditional' lifestyles are seen as authentic, while other people are seen as somehow deviant or not the genuine article. Part of this problem lies in the conceptualisation of culture as static rather than dynamic, a criticism which Michael Mel of the University of Goroka has levelled at this Solomon Islands work (Mel 1996). Readers therefore could interrogate the following article in terms of the extent to which it constructs particular Solomon Islands learning approaches as traditional and thus the extent to which it implicitly sets up unsustainable notions of authentic and unauthentic learning.*

*Finally, it is important to consider the problem of the inversion of hierarchies of knowledge. The rationale behind the research described below was to incorporate into my classrooms learning strategies and contexts which would result in better learning by my students. It was envisaged that incorporating strategies and contexts with which students were already familiar would enhance learning and provide a point of departure to expanding students' learning skills repertoires. In retrospect, it was an exercise in identifying and using processes of knowledge acquisition which were marginalised in and subjugated to the formal school system, and putting them in a place of prominence. In Foucault's (1980: 81) terms, it was an exercise in the "insurrection of subjugated knowledges", of inverting the existing hierarchy of knowledge valuations. As Foucault (1980: 86) points out, however, "is it not the case that ... the particular elements of the knowledge that one seeks to disinter are no sooner accredited and put into circulation, than they run the risk of re-codification and re-colonisation?" In other words, while the incorporation of Solomon Islands' strategies of knowledge*

*acquisition into the curriculum may be in some sense morally justifiable and pedagogically useful, it also may be the case that these knowledges then simply become absorbed into education systems which remain for the most part elitist and unequal, which retain their primarily colonial character, and which continue to contribute to increased social stratification. The small and in some ways flawed attempt at an insurrection of subjugated knowledges which the following article describes is therefore incomplete if it is not accompanied by an examination and inversion of the wider educational structures which contribute to the maintenance and exacerbation of social inequalities.*

**Abstract:** *This article presents the findings of a field-based study which employed ethnographic techniques in the form of extensive participant observation and semi-structured and informal interviews to determine the major informal learning strategies employed by Melanesian people in Western Province, Solomon Islands (WPSI), and the contexts in which such strategies were most prevalent. Major strategies were: observation, passive and active imitation, partial and full participation, listening, and asking. The educational implications for teachers in western-style classrooms in Solomon Islands and in non-industrialised societies in general are discussed.*

*The conceptual framework which informed the research presented in this paper originated in the work of Kneller (1965). He suggested that learning processes or strategies, that is, activities which foster learning, are an integral part of almost any human learning. According to Kneller (1965), the principal learning processes were watching, doing and listening, and the emphasis which was placed on each of these varied from one culture to another, and from one learning task or content area to another. Kneller (1965) also mentioned the importance of contextual influences on learning processes, and observed that the peer group, social power structures, and the social status of teachers all influence learning. Thus there are essentially three facets to learning: content, strategy, and context.*

*In reviewing the literature on culture and cognition, Scribner and Cole (1973) presented substantial evidence indicating that it was unlikely*

*there are any significant cultural differences in cognitive processes. All people have the ability to perform basic cognitive activities such as memorisation, generalisation, concept formation, use of abstractions and logical reasoning. Scribner and Cole (1973) suggested, therefore, that the differences in learning behaviours exhibited by individuals from different cultural groups was not the result of varying cognitive ability. Like Kneller (1965) and Lave (1988), Scribner and Cole (1973) acknowledged that variations in learning behaviours, including the selective use of particular learning strategies, are substantially influenced by the sociocultural context in which learning occurs.*

*Each culture, then, has its own informal learning system, comprising strategies, contexts and content, which students from that culture bring to the formal learning environment of the classroom. The resulting interaction between the informal and formal learning systems has profound effects on classroom behaviour and the outcomes of formal learning. Such interaction has been examined in a variety of cultural settings, and the findings of several of these studies are reviewed briefly below, particularly in relation to learning strategies.*

*These studies have further established the importance of students' cultural background on their learning system and the extent to which this affects learning in cross-cultural classroom situations, that is, those in which the culture of the home differs substantially from the culture of the school (see, for example, Levin 1978; Philips 1983; Harris 1984; Christie 1985; Jordan 1985; Sanders 1989; Little 1990; Watson-Gegeo and Gegeo 1992). Whilst it could be argued that the strategies and contexts of learning described in these studies are found in many other cultures and even in classrooms, the important point is that each culture places emphasis on particular aspects of the learning system and often much less emphasis on the strategies and contexts demanded in classroom situations. In fact Harris (1984) has shown that some aspects of a student's home culture may be in serious conflict with the demands of classroom learning.*

*The contextual elements of informal learning in Solomon Islands have been dealt with elsewhere (Ninnes, in press) and will be reviewed*

*below. This paper focuses in particular on learning strategies as the second major element of informal learning systems, since strategies are part of the "more subtle, subjective aspects of culture that affect instructional interaction and learning" (Cushner 1990: 101). These learning strategies are then related to the contextual framework previously developed. In reporting results, particular content areas will be discussed, although content is not the primary focus of this paper.*

### **Informal Learning Strategies in Non-Industrialised Societies**

Studies of the learning strategies employed in a variety of non-industrialised societies have revealed several broad areas of similarity. In Polynesia, learning strategies such as observation, imitation and participation are emphasised much more than learning through verbal interactions. When knowledge is transferred verbally, questions tend to be of the information seeking type rather than the information probing type found in western classrooms, and new knowledge is validated by the corroboration of other people rather than by recourse to western authority figures such as books or teachers (Levin 1978; Ritchie and Ritchie 1979).

Harris (1984) notes that observation, imitation, personal trial and error, real life performance, mastery of context-specific skills and person-oriented learning are the dominant informal learning strategies employed by Aboriginal people at Milingimbi in North Australia. He contrasts this with schools which employ oral or written instruction, demonstration, practice in contrived settings and the learning of decontextualised, generalisable principles.

Within the Native American context, various authors note the presence of learning strategies such as observation, imitation, verbal instruction, and participation in everyday activities. Questioning is often discouraged and quietness is encouraged (Philips 1983; Sindell 1974; Souaid 1988; Spindler 1963; Cazden and John 1971).

## **Informal Learning Strategies in Solomon Islands**

For the purposes of this study, Solomon Islands consists of all those islands comprising the independent nation of Solomon Islands plus the island of Bougainville to its north west, which is geographically and culturally part of the same island group. Solomon Islands is part of the area of the south-west Pacific known as Melanesia, which also comprises Papua New Guinea, Vanuatu, New Caledonia and parts of Fiji. Over 90% of the population of Solomon Islands is Melanesian, with the balance principally consisting of Micronesians, Polynesians, Chinese and Europeans. Western Province consists of the main islands of New Georgia, Choiseul, Vella La Vella, the Shortlands group, and a large number of smaller islands.

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Most of the anthropological literature reviewed below pertains to parts of Solomon Islands other than the Western Province in which the present study occurred. The exceptions are Scheffler's (1965) work on the island of Choiseul and Capell's (1943) and Russell's (1948) work in the Marovo Lagoon region at the eastern end of New Georgia. Each of these authors, however, mentions informal learning in only a brief and cursory manner, the major focus of their work being elsewhere.

The learning strategies of observation and imitation consist of watching someone performing a skill and then copying them at the same or a later time. These strategies are reported from the islands of Bougainville (Oliver 1955), Malaita (Hogbin 1939; Cooper 1973; Ross 1973) and Guadalcanal (Hogbin 1964). They were used to learn skills such as fishing, swimming, dancing, weaving, rope-making, fighting and house construction.

Another learning strategy reported in the literature is that of participation, in which children are involved to a greater or lesser extent in actual adult activities as they are being performed. This strategy has been reported from Malaita (Hogbin 1939; Ross 1973; Burt 1982), Guadalcanal (Hogbin 1964), Isabel (Bogesi 1948, 1949), Choiseul (Scheffler 1965) and Marovo (Russell 1948) to learn skills such as dancing, food gathering, household chores, gardening, ritual activities,

sibling caretaking and canoe handling.

A third major learning strategy in Solomon Islands is listening. Children receive verbal instructions and hear stories, songs and everyday conversations. This strategy has been reported from Malaita (Hogbin 1939; Keesing and Fifi'i 1969; Cooper 1973; Maranda 1975; Keesing 1978; Watson-Gegeo and Gegeo 1986a, 1986b), Bougainville (Oliver 1955; Delpit and Kemelfield 1985); Guadalcanal (Hogbin 1964), and Marovo (Capell 1943). Using this strategy, children learn such things as societal values, correct use of language, word taboos, myths and folklore, genealogical relationships and their associated behavioural obligations and privileges, gardening techniques, and names of plants and animals.

### **Informal Learning Contexts in WPSI**

In a previous article, Ninnes (in press) examined the contexts in which informal learning occurred in Western Province, Solomon Islands. In that study, it was found that informal learning occurs within a cultural context in which the key value is the maintenance of the *wantok* system of obligatory kin relationships. For children of school age, these obligations are manifest in the ways children behave toward elders, and toward younger and older children. In order to maintain good relationships, children are encouraged to respect elders by rendering assistance when asked, by using appropriate speech forms, and by being humble. Good relationships between peers are maintained by sharing food and belongings, avoiding conflict, and helping each other. A large proportion of informal learning occurs in the peer group. The peer group often has a broad age range, and activities within the peer group are organised by older or more assertive individuals. Much learning also occurs in the presence of members of the older generations, especially parents, grandparents, aunts and uncles. Community members may identify individual members of the older generation who are deemed to be experts in particular fields. These acknowledged experts maintain their status not only through the application of their knowledge and skills but also by applying their knowledge and skills in ways which enhance the cultural goals of the

group, especially the maintenance of good relationships between group members. Finally, Ninnes (in press) found that informal learning occurs within a particular epistemological context. Most operational knowledge, that is, knowledge pertaining to customs and life tasks, is in the public domain. The exception is knowledge concerning custom stories relating to land boundaries, which is restricted to adult members of the group claiming the land. Interpretive knowledge, that is, knowledge about the meaning of events, is accepted by the wider community only if the provider of the interpretation has a high standing in the community. This high standing is principally derived from an individual's compliance with the cultural norms of humility, respect and the maintenance of good relationships.

### **Study Aims and Setting**

The findings reported in this paper are part of a larger exploratory study into the relationship between culture and education. This paper focuses on two of the aims of that broader study.

- (a) To determine the nature of the informal learning strategies used by Melanesians in Western Province, Solomon Islands (WPSI), and relate these to the contextual elements of the informal learning system outlined above; and
- (b) To suggest some of the implications of these informal learning strategies for western-type classrooms in Solomon Islands and in non-industrialised societies in general.

Thomas' (1985) study of the relationship between culture and curriculum in Solomon Islands is one of only two detailed studies of the relationship between culture and education in the country. He approached the task from the perspective of an officer in the Ministry of Education, and therefore tended to have an educational administration orientation. Watson-Gegeo and Gegeo (1986a, 1986b) have made a significant contribution to an understanding of language socialisation amongst the Kwara'ae of Malaita, but their field data on informal learning consists principally of tape recordings of family discourses

(Watson-Gegeo and Gegeo 1992: 22), and thus lacks the broad perspective on informal learning derived from extensive observational data which is presented in this paper.

The study was based at Goldie College, a co-educational United Church secondary boarding school near Munda in WPSI. The school predominantly draws its students from WPSI. Field work was conducted at the college and during field trips of up to 3 weeks duration to various sites in the province, including the islands of New Georgia, Parara, Choiseul and Vella La Vella. Data collection was most intensive during the last 2 years of my 4 years' residence as a science teacher at Goldie College.

## **Methodology**

Qualitative methods used in this study were:

- (a) Participant observation of children and adults involved in a wide variety of activities. Participant observation notes were recorded when incidents occurred or as soon as possible afterwards for a period of 22 months. The notes were regularly reviewed in order to evaluate the range and type of data being collected. I was fortunate in obtaining a head start to immersion in the world of Solomon Islanders by being resident at Goldie College for the two years prior to commencement of data collection, and for two years before that in Vanuatu which has cultural features similar to Solomon Islands. During our stay in Solomon Islands, my family and I tried in every way possible to take part in the life of the Goldie College community and to live in a manner similar to the Solomon Islander families living at the school. We learned to speak the national lingua franca Pijin, which is similar to Bislama in which we had become fluent in Vanuatu. Almost everybody in Solomon Islands speaks Pijin. I also made considerable effort to learn the local vernacular Roviana, which previously had the status of a lingua franca in the Western Province and which is spoken by most people over about forty-five years of age associated with the United Church

(Early 1981). Rudimentary words and phrases were also learned in Babatana, the lingua franca of Choiseul, and Bilua, the lingua franca of Vella La Vella. The former in particular was useful as many Goldie College staff came from Choiseul and the language was commonly heard there.

During the period 1988-1990 my wife and I, with help from various friends, worked a substantial subsistence garden in the bush behind the school and adjacent to several other staff gardens. This project provided many opportunities to share experiences, develop friendships, observe people interacting, break down social and cultural barriers, and learn language. It also created opportunities for Solomon Islanders to teach us, giving us more of an image as 'commoners' rather than 'big men', the latter being a common way in which expatriate missionary teachers are perceived.

We also cooked and ate local food, made copra on a drying rack in our outside kitchen, went fishing with local people for various kinds of fish including bonito and kingfish, had two babies at the local hospital, raised a pig, held feasts for our children's first birthdays, adopted dress habits similar to those of the local people, joined in fellowship meals and groups, and participated in church life.

- (b) Semi-structured interviews of 10 selected indigenous consultants. In these interviews each consultant was asked to relate how they had learned to perform particular tasks. Some consultants were interviewed more than once. The average number of interviews per consultant was 1.9 and the average total time spent interviewing each consultant was 2.1 hours. The 10 consultants, consisting of 5 females and 5 males, were from a variety of islands in WPSI (Choiseul, New Georgia, Parara, Vella La Vella and Marovo), had a broad age range (20-59 years) and occupational history (carpenter, home duties, nurse, domestic worker, teacher, pastor), and had been known to me for an average of 2 years and 9 months before the first

interview. Interviews were conducted in Solomons Pijin and English.

- (c) Informal interviews. As a participant in the very wide range of activities described above, I had the opportunity to partake in everyday conversations about the events that were occurring and elucidate the participants' perspectives on them. Records of these conversations were kept as part of the observation notes, with care being taken to note the topic being discussed, who initiated the conversation, who made each statement and in what context. Where possible, verbatim notes were recorded in order to reduce the possibility of imposing my own interpretation on statements.

### **Learning Strategies in WPSI**

Five major learning strategies were identified in this study. They are: observation, imitation, listening, participation and asking.

#### **Observation**

Learning by observation involves watching another person performing an activity and then copying them at a later time (cf definition of imitation, below). Data collected in this study confirmed the important role which observation plays in the WPSI learning system. Observation occurred both within the context of the peer group and when children were in the presence of members of the older generations. The following example is one of several anecdotes collected which illustrate learning by observation. To maintain confidentiality, names of participants are represented in this and following anecdotes by the use of random two-letter codes. All anecdotes are direct quotations from the field journal and are enclosed in inverted commas.

"FN bought a small rice bag full of okete nuts at the market. She wanted to roast some in order to preserve them, but didn't know how. So she asked DB and EP. Both said that though they'd seen it done several times before, neither of them had actually tried it. Nevertheless,

they knew which leaves to use, how hot to make the fire and how to arrange the leaves, hot stones and nuts so that the nuts would be cooked properly. So the three of them did it together successfully."

In this incident, there is a lengthy time lag between the learners (DB and EP) seeing the activity performed and performing it themselves. Nevertheless, they knew the relevant details of the task and how to implement each step. This is also an example of the unrestricted nature of knowledge pertaining to the skills. In this incident, FN wanted to know how to cook the nuts, and she simply needed to ask her friends to show her how to cook them and they did.

Several of the consultants reported learning by observation. Skills learned in this way included fishing, canoe construction, weaving, cooking, and housework. In most of these cases, learning occurred with members of the older generations. This use of observation for learning life skills parallels the findings of researchers working on Bouganiville (Oliver 1955), Malaita (Hogbin 1939; Cooper 1973; and Ross 1973) and Guadalcanal (Hogbin 1964).

One particular aspect of observation which was often recorded in the field notes and reported by consultants was role-playing. This kind of learning strategy was not mentioned in other accounts of learning by observation in Solomon Islands, such as Hogbin (1939, 1964), Cooper (1973) and Ross (1973). Among other things, children were observed role-playing choir performances and house-building. Consultants reported that they role-played activities such as looking after babies, throwing spears, catching fish, gardening, paddling canoes, and house-building. Role-playing was most commonly reported as occurring within the context of the peer group.

### **Imitation**

Imitation means seeing something happening and copying it at the same time or immediately afterwards (Harris 1984). This study identified two kinds of imitation: passive and active. Passive imitation involves no mutually conscious interaction between the imitator and the imitated.

The following example illustrates passive imitation of an elderly man by a WPSI child. Many other incidents of a similar nature were observed.

"Outside the church building an old man of about 60 was cutting grass with a sariff. Nearby, a boy of about 5 attacked the grass with similar movements, but instead of a sariff he used a flat stick about 4cm wide and 40cm long."

Consultants on this research did not generally distinguish between observation and passive imitation. In some cases there is an implied or stated time lapse between looking and doing. In other reports the time lapse is not clear.

Active imitation involves a conscious interaction between imitator and imitated. This is sometimes referred to as 'showing'. Active imitation is often accompanied by verbal instruction which is discussed further below. The following anecdote illustrates the use of active imitation of an elder to foster learning in WPSI. A middle-aged man, EN, was organising a group of people preparing a mortuary feast for EN's two uncles. The group consisted primarily of a circle of teenage boys who were cutting up pork and parcelling it in leaves.

"To one side, but adjacent to the main circle, were 3 younger boys about 10 years old who were also wrapping up pork parcels. They were tying them up in a simple way - just wrapping a shred of leaf around a couple of times and tying an ordinary knot. EN saw how they were doing it and came over and showed one boy how to do it, step by step, explaining each step verbally. First he looped one end of the rope over his thumb, then he wrapped it several times round the parcel, put the free end through the loop and tightened it by pulling on both ends. He put the parcel on the pile and showed one of the other boys how to do it in the same way. Then EN went back to cutting up the pig. The second boy that he'd shown then continued doing it correctly, but the first boy was wrapping the rope around above his hand instead of below it."

The use of active imitation or showing was reported by several

consultants for learning skills such as digging, planting and harvesting, fishing and cooking. In the majority of these reports, a member of the older generation showed the consultant how to perform the task. One consultant reported that her parents did not show her how to make a garden, but simply told her to go and do it.

As noted above, previous Solomon Islands ethnographies have not distinguished between observation and imitation. However, Harris (1984), in his ethnography of informal learning among one Aboriginal Australian group, did make such a distinction, and the replication of Harris' finding in the current study indicates that the time lapse between seeing and doing is an important one. Furthermore, the learning strategy of active imitation found in the WPSI informal learning system is identical to the strategy which Sanders (1989) referred to as 'showing', and this indicates that this kind of learning may be widespread in Melanesian societies.

## **Participation**

In this analysis 'participation' is a learning strategy which involves the learner being closely involved in doing that which is being learned. This definition of participation incorporates the concept of 'trial and error' used by Harris (1984). This research has revealed that participation often occurs only after a period of observation, and that for some knowledge areas there is an intermediate stage of 'partial participation'. In this intermediate stage, the learner usually performs the easier part of the task, and someone else performs the more difficult parts. Analysis of anecdotal data pertaining to partial participation shows that it is older people who judge the relative difficulty of the tasks and decide which parts children will perform. The timing of the onset of full participation also varies, and appears to be related to the area of knowledge involved and the context in which the participation is occurring.

## **Participation and Observation**

The linear relationship between observation and participation can be implied from data obtained from observations of children playing. An

analysis of the actors involved in one observed incident will illustrate the connection between observation and participation. In WPSI, children were often seen playing a game which could be called the 'Rubber Band Game'. It involves two players throwing or flicking rubber bands onto the ground about 3 to 5 metres in front of the players, attempting to land the rubber band so that it overlaps one already on the ground.

"A large group of children was playing or watching the rubber band game. Instead of tossing the rubber bands, they stretched them over their thumbs and dinged them towards where the cement floor met the wall. There were two games in progress simultaneously. GT, EW and GB were in one group, two of whom played at one time, the third taking over from the loser. The other game was between EM and EL. At one stage FZ and BP were also playing but they wandered off after a few minutes to play at watering plants, collecting water from the tank in half coconut shells and carrying them off behind the kitchen. AE was also wandering around, with EL keeping an eye on her and at one stage taking a bush knife away from her."

Many similar instances have been noted in which younger children watch older members of their peer group playing. One or two-year-olds are often present while older children play. Their observation is not systematic or concentrated, but over time it appears that the younger children learn how to play the game and eventually begin to play themselves.

The above incident involves children aged 6 years or over except for AE who was two years old at the time and who acted as only a peripheral observer in the incident. Fifteen months later, children born in the same year as AE were seen playing the rubber band game at Goldie College. In this incident, the youngest children were only observers, while the older children either watched or participated actively, or alternated between watching and participating.

## **Partial Participation**

Many cases of partial participation were observed in WPSI, and these were corroborated by consultants' reports. The following incident is an example of the way household chores are learned by partial participation.

"An old woman, EJ, was sweeping the road in front of her house. As she made piles of leaves and flowers, her two grand-daughters, CC and DG, aged 8 and 6 respectively, used a rice bag to pick up the rubbish and take it and throw it into the sea. When she finished sweeping the road, she swept the sand between the road and the sea. The girls would sometimes wander off if no rubbish was ready, then EJ would call one of them when it was ready."

In this incident it can be seen that the children are not performing every aspect of the task and that adults and other older people make judgements about the level at which children will participate. Three consultants also reported that they partially participated in household chores such as fetching hot coals for starting fires and lighting adults' cigarettes, fetching pots, carrying firewood, collecting leaves for cooking, digging up potatoes, cooking, washing clothes, and collecting dry coconut shells for the fire.

Many other instances of learning life skills by partial participation were observed during the period of fieldwork. These included fishing, food gathering and production, and handling and navigating canoes. In addition to life skills, important values are learned by partial participation. One obvious example is learning to share. Many instances were observed in which parents sent children to give surplus food to neighbours. It can be seen from the above analysis that partial participation occurs most commonly in learning contexts which involve the presence and active participation of members of the older generations.

## **Full Participation**

During observation, children see how things are done. Later they try things for themselves. In some instances, they only perform part of the task: they partially participate. Later, and in other cases, they participate fully, performing the entire task. Participation allows an individual to attempt, practise and perfect skills previously only observed. Observation plays a reduced but still significant part in the learning process during participation, as individuals continue to observe others performing the same task or other parts of the task. They use these observations to evaluate and fine-tune their own performance.

The data collected on participation as a learning strategy in WPSI can be divided into two categories: those in which individuals were observed performing a task alone, and those which involved a group. The data on individuals can be divided further into two sections, namely data on people who were performing a task which they had probably previously observed someone else doing, and data on people for whom for which there was probably no a priori observation. These latter incidents could be said to involve pure trial and error, whereas in the other incidents, individuals and groups were using knowledge gained from watching others to help them perform the task at hand and hone their skills.

## **Pure Trial and Error**

Only two incidents were observed which clearly fit into this category. Each involved a child playing with interlocking bricks called Duplo and Lego, which neither child had at home. One of these incidents is reproduced below and involves an 8-year-old boy, EW, who had come to our house with his family for a birthday party. After the meal, the children were playing on the floor with various toys.

"EW sat on the floor playing with Lego. He didn't know how to join the pieces. He tried to join two squares together by their bases. When this failed, he discarded one square and tried another. After discarding three squares he turned the fourth over and fitted top to bottom. He tried to fit blocks on the baseboards. He could see some others stuck on, and

kept glancing at them, but he glided his own block across the top of the studs without pushing it at the right moment. He did this on 4 separate occasions without success. On the fifth attempt the block was in the right position before he pushed and fitted it in. He then connected a row of blocks across the baseboard."

In each of the two observed incidents the child had had no prior experience with the toys, and no one around him could or would help him. Each learned how to attach the blocks by trying it until he succeeded. This kind of 'learning by doing' appears to be relatively rare. In most situations, the learner has a priori knowledge of the task, gleaned from observation or partial participation, or there are other people available with whom they can discuss how to do the task or who will tell them how to do it. When such an external knowledge source is absent, children employ trial and error as a learning strategy.

### **Individual Participation with a Priori Observation**

There are many skills which individuals practise and perfect whilst utilising knowledge gained from previous observation. Sometimes these skills are also learned in a group situation, at other times individuals perform the tasks more or less alone. One skill is caring for young children. Many cases of sibling caretaking were observed in WPSI. One of these is described below:

"A girl of about 6 led her 2-year-old brother down to the sea to go to the toilet. While he was squatting on the beach, she ran up to watch the rubber band game in progress nearby, then ran back to check him. When he'd finished she wiped his bottom, buried the evidence and carried him home."

Three female consultants also report looking after younger siblings from the age of about 6 years or being looked after by older children.

### **Group Participation**

A large number of examples has been recorded of children learning by

participating fully in a peer group. This section will present some examples of group learning which show the kinds of knowledge learned in these contexts and the way in which other learning strategies are utilised by the group.

In this study, children were observed performing many different tasks in peer and other groups. These included fishing, sibling caretaking, dancing, singing, playing games, canoeing, washing clothes, and building. The following example demonstrates the general ways in which learning occurs as children participate in these activities. It occurred prior to Christmas. There were to be various Christmas activities and much time was being spent preparing and practising for them.

"A group of girls is practising a singing/dancing routine to be performed at Christmas. They practise behind a kitchen about 40 metres away. They almost always sing the same song through once or twice from beginning to end, dancing as they sing. Last night they did '*Guni Tava Sa Podo*' ('*He is Born Today*') 8 times altogether with a short break in between. They finished off their practice session with a different song sung only once. This morning they went through '*Guni Tava*' 4 times with breaks in between, and tonight another 9 times with breaks, then finished with a different song to the tune '*Sloop John B*'."

My journal records that this group practised '*Guni Tava Sa Podo*' on at least 6 of the next 12 days, for up to one and a half hours at a time. Each session followed a similar pattern to the others, with the song being sung from beginning to end several times with a short break between each rendition.

This example is significant because it reveals that repetition is an important aspect of learning by doing, or participation. Although multiple dancing practices condensed into a two-week period is possibly a somewhat contrived situation, nevertheless the principle of learning by repetitive participation is applicable to many 'real life' skills, which are perfected or fine-tuned in this way over a long period of time.

Interview data also suggest that participating in group activities is an important learning strategy. Consultants identified canoeing, cooking, sibling caretaking, swimming, fishing and singing as knowledge areas in which they themselves gained competence by doing them with others.

Although participation was identified as an important learning strategy in Solomon Islands ethnographies (e.g. Hogbin 1939, 1964; Bogesi 1948, 1949; Russell 1948; Scheffler 1965; Ross 1973; Burt 1982), the current study has greatly expanded the understanding of this learning strategy, particularly with regard to the contexts in which it occurs and the content of learning in these contexts. Furthermore, this research has broadened the theoretical understanding of participation by identifying several types of participation and detailing the relationship between participation and other learning strategies. The prevalence of the three learning strategies described so far suggests that informal learning bears an important resemblance to informal learning in Polynesia as described by Levin (1978) and Ritchie and Ritchie (1979) and amongst Native Americans (see, for example, Spindler 1963; Cazden and John 1971; Sindell 1974; Philips 1983; Souaid 1988). However, compared to the informal learning system of Aboriginal Australians at Milingimbi described by Harris (1984), the learning system in WPSI involves less use of personal trial and error because the extent of prior observation usually diminishes the need to employ such a learning strategy.

### **Listening**

Many incidents were observed in which children were given verbal instructions or were learning by listening to songs and stories. The following anecdote is one example of learning from a member of an older generation.

"We went to tea at GE's parents' house. Also present were all the BBs, GE's paternal uncle, four of GE's brothers and sisters and two of GE's uncle's kids. One of the latter, a male, had his young son with him. They live in Honiara and the little boy did not recognise GE and BJ. GE gave him a plate of food and he looked frightened and half hid behind

his dad. GE said 'Aunty. I'm your Aunty. Perhaps you don't know me because I've been at Goldie and you've been in Honiara.' Later in the evening she said to him 'Come and shake hands with your Aunty. Come and shake hands,' but again he was too shy."

Other observed incidents involved children being told to share food with others, to sit still in a moving canoe, to not disturb adult conversations and to say 'thank you'. Consultants reported that their parents told them how to behave properly, especially towards particular kin, how to cut down large trees and clear secondary growth for a garden, and how to plant and harvest sweet potato and taro. Some of these instructions occurred within the context of particular activities, whilst others occurred before the time in which the children would need the knowledge. For example, when visitors arrived whom children had not previously met, their parents would tell them 'That's your aunty, your mother's sister' or 'That's your cousin, your uncle's child'. Instances of children being told stories about mythical characters and local customs were also observed and reported by consultants.

Although listening was a common learning strategy in WPSI, its use was limited to particular content areas, especially those concerning genealogies, proper behaviour and customs. The use of listening as a strategy for learning life skills was usually employed simultaneously with observation or some degree of participation.

### **Asking**

Only a small amount of data was collected pertaining to this learning strategy. That which was collected revealed two key types of questions asked by children: those requesting information and those seeking help or advice. The first kind is typified by the following case.

"This afternoon AK was outside the lab talking to BK who had come up to the library with her mother. FG was standing in the doorway of the lab. AK and BK were speaking in Roviana. AK has grown up in Honiara, and speaks Bilua and a little Roviana. At one stage in the conversation BK used a word that AK didn't know, so AK turned to FG

and asked her in Pijin the meaning of the Roviana word. FG told her and AK replied to BK in Roviana."

Six of the ten consultants also reported asking or being asked information-seeking questions about genealogies, relationships and identity of strangers, and the names of plants and animals.

The second kind of question is that seeking advice or help in performing a task. The following incident illustrates this kind of learning strategy:

"BK found a shoe and was trying to put a shoelace in it. Her mother, AP, saw her start by putting it in the holes nearest the ankle so she said to her '*Lopu vasina. Pa kalina mae.*' [Not there. (Start) on this side]. Having finished lacing it, one lace was much longer than the other, so BK took it over to her mother and asked her to fix it. She took the other shoe and laced it, then took it to her father to fix it when she'd finished."

One consultant recalled asking her mother to help her with weaving, and another asked her older sister for help with the same skill. The latter also said that her seven-year-old daughter often asked her when she wanted to learn how to perform tasks such as weaving or making string bags. A third consultant reported that his adult son asked him for advice on the best way to mark a tree he had cut down for making a canoe.

As with the learning system in Polynesia reported by Levin (1978) and Ritchie and Ritchie (1979), asking in WPSI was restricted to information-gathering questions or as indications of a desire to learn a particular task. Probing questions, particularly those relating to motives and reasons, were almost never observed. Discouragement of certain types of question parallels a similar phenomenon found among several Native American groups (see, for example, Philips, 1983).

The informal learning strategies employed in Solomon Islands bear broad but important similarities to those described by other authors in Polynesia, North America and Northern Australia. Each tends to

emphasise learning through observation, imitation, and various degrees of participation. Verbal instruction is often only used in particular contexts, and questions tend to seek information rather than to probe motives or reasons. These learning strategies are also employed to a certain extent in western-style classrooms, but usually in the latter case the emphasis is on verbal instruction, and inadequate resources often limit student participation.

The following discussion of the educational implications of informal learning strategies is drawn primarily from the author's experiences as a teacher in Melanesian societies. However, as noted above, there are broad similarities between the informal learning strategies employed in various non-industrialised societies, and these often contrast to a substantial extent with the learning system required in the classroom. Therefore the following discussion, whilst not prescriptive, can act as a resource from which teachers working in a variety of non-western societies can select strategies which they feel may be useful in, or which can be adapted to, their cross-cultural classrooms on the basis of their own classroom observations and their knowledge of their students' cultural backgrounds. The suggestions are grouped under headings comprising the learning strategies discussed above.

### **Observation**

The teaching of practical skills such as laboratory, industrial arts and home economics techniques may be effectively taught partly by using demonstrations repeated over a period of time. The level of verbal explanation in these demonstrations need not be great (although see implications of imitation, below). Such a practice would be congruent with the occurrence of learning by observation of members of the older generations prevalent in the Solomon Islands' learning system described in this paper. Students may be able to retain the understanding they have gained from these demonstrations for a substantial period of time without the need for constant practice.

## **Imitation**

The use of demonstrations mentioned above can be supplemented by verbal explanations, provided the language used is suited to the students' aural comprehension ability. If adequate amounts of equipment are available, opportunities can be provided for students to imitate the teacher as the demonstration is occurring or immediately afterwards. Such techniques are congruent with the employment of active imitation of elders by Solomon Islands children described above.

## **Participation**

Since observation precedes participation in the informal learning system employed by children in WPSI, students from similar backgrounds may be willing to engage in activity-based learning activities if their own participation has been preceded by a suitable period of observation of the materials' use (e.g. through demonstrations). In situations in which students are required to participate in activity-based learning activities without prior observation or familiarity with the materials and procedure, they may use strategies such as trial and error or observation of other students' efforts to determine procedure in preference to strategies such as reading written instructions. Since in the informal learning system partial participation tends to be predominant in contexts involving elders, the level of participation by students may be significantly less if an elder such as a teacher is also participating in the activity. In the informal learning system, full participation most commonly occurs in the peer group context. Thus student participation levels in the classroom may be greatest when students are working alone or in groups consisting solely of peer group members. As there is often a gradual shift from observation, to partial participation, to full participation in informal learning, students in the classroom may be more willing to engage themselves in activity-based learning experiences if the level of participation is graded over time, starting with observation, then partial participation and finally full participation.

## **Listening**

As listening to instructions and stories is an important strategy within the WPSI informal learning system, students are usually willing to listen to teacher monologues provided that the level of language used is comprehensible to them. Preceding monologues with a statement such as 'I'm going to tell you a story ...' may increase students' desire to listen. Teacher expectations concerning students' appropriate classroom and social behaviour may be effectively transmitted and reinforced through verbal explanations without the need to threaten the imposition of sanctions. The use of oral learning aids such as songs and mnemonics may be very effective.

## **Asking**

The relative rarity of the use of asking as a learning strategy, the predominance of information-seeking questions and the relative absence of probe-type questions within the WPSI informal learning system all have important educational implications. First, students may not ask the teacher many questions. Second, questions asked in class may be predominantly of the information-gathering ('Who?' or 'What?') type rather than those probing for motives or reasons ('Why?'). Third, students may not understand alternative (non information-gathering) uses of oral questions such as the evaluation of student progress. Thus teachers may need to overtly explain to the students the role in the classroom of unfamiliar questioning styles in order for such questioning styles to be effective.

## **Conclusions**

This paper has described the informal learning strategies employed in rural WPSI. It has provided a more detailed analysis of these phenomena than previously provided in the WPSI anthropological literature, but the close similarities between the findings of this study and phenomena reported in the anthropological accounts from other parts of Solomon Islands, albeit in much less detail, suggest that the learning strategies of children and adults in WPSI may be shared to a

large extent with people in other parts of the archipelago. There are also broader similarities with the account of informal learning strategies described from other non-western societies. As such, this study has important implications not only for teachers throughout Melanesia, but also for teachers in a variety of cross-cultural contexts. The discussion of educational implications provides a framework for teachers to understand their students' classroom behaviour and to adapt their teaching strategies accordingly. Such understanding and adaptation will enhance learning by reducing the learning gap which results from differences between traditional and school learning systems, thus contributing both to an improvement in educational standards and to an affirmation of the positive contribution which non-western cultures can make to classroom learning.

*Note: The substance of this paper is drawn from an MA thesis entitled **Culture and Learning in Western Province, Solomon Islands** (Ninnes 1991). The author wishes to express his sincere gratitude to all those who assisted in the research.*

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