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The Perceptual Preferences of a Group of Malaysian Kindergarten
Children and the Effects of Tactile and Kinaesthetic Teaching
Methods on their Learning of Bahasa Malaysia as a Second
Language.

A thesis presented in partial fulfilment of the requirements for the degree of Master of Education at Massey University

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#### Abstract

This intervention study was undertaken in response to a teacher's desire to acquire more effective language teaching methods to use with a small class of academically able, but disinterested five to six year olds. It was decided to trial the use of tactile and kinaesthetic methods because learning style research literature indicates that these are the preferred perceptual modalities of children of this age and the existing language teaching programme consisted almost entirely of auditory and visual activities. Preintervention interviews confirmed the first hypothesis: that the children preferred tactile and kinaesthetic learning.

Pre- and post-testing of each lesson also confirmed the second hypothesis: that the class as a whole would achieve greater gains in vocabulary acquisition with the introduction of tactile and kinaesthetic learning activities. In a total of 18 out of 23 instances there was a significant pre-post gain on tactile lessons. In a total of 19 out of 24 instances there was a significant pre-post gain on kinaesthetic lessons.

However, the final two hypotheses positing an advantage of the tactile and kinaesthetic experimental lessons over control lessons were less strongly supported. Whilst the experimental lessons were slightly more effective than the controls, yielding three, and virtually four significant gains over the control lessons in six trials (p=.0157, p=.0389, p=.0440, p=.0633), the gains registered for matched conditions did not significantly exceed those for unmatched conditions. Reasons are argued to lie in a spread of effect from the experimental to the control lessons, and the need to consider the influence of other learning style elements.

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# Chapter 1

#### Introduction

Perceptual preferences are just one of many aspects of learning style which may affect young children's ability to "concentrate on, process, and retain new and difficult information" (Dunn, Dunn & Perrin, 1994, p. 2). Some learners may be able to learn, no matter how information is presented, and others may have difficulty, regardless of the mode of presentation. However, perceptual preferences are a logical place to start a consideration of whether individual learning style affects learning because new information cannot be processed and retained unless it has been perceived. If learners have difficulty concentrating on information presented in a perceptual modality which they do not prefer to use, whether auditory, visual, tactile, or kinaesthetic, then that modality may prove to be an ineffective channel for teachers to try to use, if the goal of instruction is optimisation of individual learning. However, in order for teachers to be able to plan and conduct their lessons in a way that will accommodate individual perceptual preferences, they must first be able to identify the preferences of their students and have access to resources and techniques which enable them to present their lessons appropriately.

In the first instance, this study set out to determine whether it was possible to identify the perceptual preferences of a group of young Malaysian children through the use of self-report information. There are a number of instruments which claim to be able to assess perceptual preferences, but most were not designed for young children, or for non-native speakers of English. The reliability and validity of such instruments cannot be automatically assumed, even if an instrument is used which has previously been extensively trailed and validated with other groups of children, because of the difficulty of obtaining accurate and reliable information from young children (Rowe, 1991), and the possibility that the instruments might not be suitable for children of different cultural and linguistic backgrounds (Reid, 1987; Melton, 1990). The instrument which was chosen to assess the children's perceptual preferences, The

Learning Style Inventory: Primary (LSI:P) (Perrin, 1991) was designed and validated for young children, however, there is little information, either in the form of dissertations, or journal articles to show that it is a useful instrument for non-native speakers of English, or groups outside the United States. Therefore, it is of interest to see how useful such an instrument might be in a different setting, and to note the problems which might occur because of cultural and linguistic differences.

Furthermore, even if young children are able to report accurately which learning activities they prefer, these activities may not actually represent the ways in which they best learn because they may lack metacognitive knowledge of their own learning styles. Learning style theory and research has been challenged on the grounds that preferences are not necessarily the same as strengths, and a number of learning style instruments have proved to have little predictive validity under experimental conditions. Therefore, in the second instance, this study set out to determine whether the children's perceptual preferences, as measured by the Perceptual Preference Subscale of the LSI:P, could be used to predict their academic performance, when teaching methods were matched and unmatched with their expressed perceptual preferences.

A third area of interest, was the effect the learning style intervention might have on the children's attitudes towards the target language, and their beliefs about themselves as language learners. There is reason to believe that attitudes and beliefs play an important role in second language learning, through their influence on an "affective filter" (Krashen, 1987), or through their effects on the types of learning strategies a student might use. Children who have positive attitudes towards the target language and confidence in their ability to use it are more likely to want to engage in interaction with native speakers of the language and acquire the language more readily than students with less positive attitudes. Many teachers would agree that positive changes in students attitudes and beliefs is a worthwhile learning outcome, not only because such changes make the teaching/learning process more pleasant, but also more productive in the long term.

The intervention was conducted during Bahasa Malaysia classes partly for pragmatic reasons, but also because there is currently a great deal of interest in learning style within the language teaching community. There has been a lack of research conducted with non-native speakers of English within the mainstream of learning style literature. However, within the language teaching literature there has been active discussion and research into the concept of language learning style, (Oxford & Anderson, 1995) and the need for culturally valid learning style models and instruments (Reid, 1990). This literature can provide a conceptual basis for learning styles, which has often appeared to be lacking in the mainstream learning styles literature due to its focus on the effects of learning style, as opposed to its causes.

### The problem

The immediate stimulus for the research was a teacher's concern over the performance and attitudes of her class of six-year-old Bahasa Malaysia as a Second Language learners and her desire to try new language teaching methods which might better enable her to meet the needs of the children. Learning style theory seemed to offer a way of identifying the needs of diverse learners, and providing guidance on means of meeting those needs within a classroom context. However, there is a lack of research evidence of the value of learning styles programmes at kindergarten level, comparatively little experimental learning styles research on non-native speakers of English, and seemingly no available information on the learning styles of young Malaysian children. Therefore, it was felt necessary to trial the LSI:P and monitor a limited learning style intervention with this group of children to establish whether they could be of benefit to the teacher and children concerned.

Data were gathered on the children's attitudes and beliefs about Bahasa Malaysia and their feelings about their Bahasa Malaysia learning experience over the course of the academic year, including before and after the intervention. This information was gathered by means of a questionnaire which is routinely administered to all language classes in the kindergarten. The children's learning style preferences, including preferences for perceptual modalities, were obtained just prior to the intervention using the LSI:P. The LSI:P is a structured interview which elicits forced choice answers in

response to pictures and set oral questions. During the seven week intervention period, the teacher taught one lesson each week using traditional auditory-visual methods, and one lesson using either tactile or kinaesthetic methods. Each lesson, the children were pre- and post-tested for recognition of the target vocabulary so that comparison could be made between vocabulary gains in matched and unmatched conditions. At the end of the intervention period, the children had a final examination on a sample of the vocabulary introduced during the intervention period to see the extent of long term vocabulary acquisition.

## Theoretical framework

The investigation was conducted within the theoretical framework of the Dunn & Dunn (1990) learning style model. The model assumes that everyone has a learning style, which consists of a stable pattern of "biologically and developmentally imposed set of personal characteristics that make the same teaching method effective for some and ineffective for others" (Dunn, Beaudry & Klavas, 1989). The model currently identifies 21 variables from five basic categories: environmental, emotional, sociological, physiological, and psychological. The variable investigated in this thesis, perceptual preference, is classified by this model as a physiological preference. Perceptual preference refers to the modalities, auditory, visual, tactile and kinaesthetic, which an individual prefers to use to learn new or difficult information. Literature based on the Dunn & Dunn (1990) learning styles model often refers to "perceptual preferences" as "perceptual strengths" which implies an assumption that learners learn best through their preferred modalities.

The investigation was conducted during Bahasa Malaysia as a Second Language classes, and the pre-and post-tests were designed to measure language acquisition. The term "second language" is used when the target language is not a learner's first or native language but it is one of the languages spoken in the country in which the learner lives, and the learner theoretically has access to native speakers of the language. The term "acquisition" is often used interchangeably with "learning" in language teaching literature, and reflects an assumption that language learning is a natural process that does not always require overt teaching. The term "acquisition" is

particularly appropriate when used in reference to second language contexts, and young children, since it is possible that the children will be exposed to appropriately simplified forms of the target language or "caretaker talk" (Lightbrown & Spada, 1993, p. 14) outside the classroom and have opportunities to acquire it in a natural context, in addition to the classroom context.

### Why learning styles?

It is important to explain why it was decided to trial a learning styles approach to language teaching, rather than any other of a number of established language teaching methods.

The history of language teaching is littered with theories and teaching methods which have been enthusiastically adopted as "the one best way" and then replaced when they failed to live up to this expectation. A brief list of these methods, which are now seldom used, could include; the Grammar-Translation Method, the Direct Method, the Oral Approach, and Situational Language Teaching (Richards & Rogers, 1986). The Audiolingual Method, is another approach which was extremely influential for a time, and though still used by some teachers has been tried and abandoned by many others.

The model which is currently in most widespread use is Communicative Language Teaching. This model emphasises the importance of communicative proficiency, rather than the mere mastery of structures. It is often regarded as a method, because "Communicative" course books often have similar formats and activities. However, as Richards & Rogers (1986) point out, there is an unlimited range of exercise types and activities which are compatible with a communicative approach to language learning (p.76). Therefore, it is better considered an approach, rather than a method (p. 83).

There are a number of other methods, which are currently being practised and discussed. Some of these methods are more widespread or influential than others, but all are potential alternatives from which language teachers may choose. Alternative methods include; Total Physical Response, the Silent Way, Community Language Learning, the Natural Approach, Suggestopedia (Richards & Rogers, 1986),

Immersion (Harley, 1986), Co-operative or Collaborative Learning (Nunan, 1992), Experiential Learning (Kohonen, 1992), Computer Assisted Language Learning (Leach & Candlin, 1985), and Self-Instruction (Dickinson, 1987). Each of these methods has something of value to offer to learners and teachers, and in many cases some of the techniques employed by one method can be used in combination with techniques advocated by other methods.

Although language teachers potentially have a wide range of teaching methods from which they can select the "most suitable" for their students, there are many practical constraints which arise within particular teaching situations. For example, computer assisted learning requires the availability of expensive equipment which may only be able to be purchased at the cost of forgoing the purchase of other learning materials. Immersion requires commitment of a large proportion of classroom time, at the expense of other languages. Language teachers alone do not determine the budget priorities of their schools, or the educational, social and linguistic priorities of their communities. For these reasons, none of the "methods" listed above was considered as being an appropriate model for change in the language teaching programme in the kindergarten. However, the proposed learning style-based intervention could be argued to be within the framework of Communicative Language Teaching.

A further consideration in the selection of teaching methods was compatability with the instructional methods used in other areas of the curriculum. English instruction within the kindergarten was based on a New Zealand "Whole Language" approach and involved contextualised and developmentally appropriate activities. The syllabus and methods adopted by the existing Bahasa Malaysia programme did not take these factors into consideration. The consultant and language teachers considered it desirable that any new programme or methods should be more child-friendly than the existing language teaching programme. Learning styles offered this possibility.

Another reason for not adopting a single recognised language teaching method as the basis for the intervention was that although each of these methods is useful for specific purposes, and for particular groups of learners, no single method has been shown to be better for everyone (Brumfit, 1984). It is not difficult to identify characteristics of each

method which would make it useful for particular subgroups of learners, and highly uncongenial for other subgroups of learners. Total Physical Response, for example, involves the co-ordination of speech and action and attempts to teach language through physical action (Richards & Rodgers, 1986, p. 87). This type of learning activity is likely to be most congenial to kinaesthetic learners, but not to learners who prefer to sit in their seats during language lessons. Co-operative or collaborative learning is congenial to students who like to work in pairs or small groups, but many students prefer to work alone. The audio-visual approach is suitable for highly auditory learners, but in some forms disadvantages those visual learners who require words rather than pictures. Suggestopaedia is compatible with a preference for a high degree of structure and the need for an authority figure present. It also involves the use of background music (Richards & Rodgers, 1986, p. 145). While some students do have a preference for these factors, many other students have opposite preferences.

The search for "one best language teaching method which will work for everyone" has been fruitless because each learner is an individual, with individual abilities, preferences, and needs. This tenet is central to the Dunn & Dunn Learning Style Model. Recognition of individual differences and needs, and enhancement of individual learning also held an important place in the kindergarten's mission statement. It was decided to trial a learning styles approach to language teaching because such an approach emphasises identification, acceptance and responsiveness to individual needs, while retaining the ability to encompass established language teaching methods.