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An Intervention Framework to Address
Learning and Behavioural Concerns

Levan Lim, Linda Gan &
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INTRODUCTION

An important aspect of effective teaching and behaviour management is the ability to select appropriate intervention strategies for addressing learning and behavioural concerns. This ability requires teachers to possess a repertoire of strategies, which they may have learnt through pre-service training, colleagues or from experience, that can be used on a group or individual basis. However, the teachers may lack a framework to guide the use of their strategies or to suggest other alternative strategies.

The purpose of this paper is to describe a framework for intervention strategies which can help teachers understand the role of different intervention strategies and how they can be used for learning and behavioural concerns.

The recently published desired outcomes of education (Ministry of Education, 1998) explicitly emphasize “nurturing the whole child”, “developing the child morally, intellectually, physically, socially and aesthetically” and developing “each child’s unique talents and abilities to the full” (pp. 1-2). In addition, the framework of Thinking Schools and Learning Nation aims to shape and nurture thinking individuals, creativity and independent learners. These outcomes reflect a child-centered approach to educating students and honouring their individuality, making it unlikely that a narrow array of intervention strategies on how to teach and deal with behavioural concerns will produce the critical outcomes so desired. It is clear that the outcomes of education aspire towards an education that is respectful of and responsive to the individual capacities of every child. What is needed is a broad array or continuum of multi-component intervention strategies that, in combination, can address the full range of desired outcomes.

A MULTI-COMPONENT FRAMEWORK

Table 1 shows a multi-component intervention framework, adapted from LaVigna, Willis and Donnellan (1989), that teachers can use to

understand the role of different intervention strategies and how they can be used for learning and behavioural concerns.

Intervention strategies can be classified into three types: short-term, intermediate and long-term. These three types of intervention strategies are described below.

Short-Term Intervention

Short-term intervention strategies refer to those which can be implemented prior to teaching or classroom management, immediately or over a brief period of time. Short-term intervention consists of two distinct subtypes: ecological manipulations and direct treatment strategies.

Ecological manipulations refer to features in school/classroom settings, such as physical set-up, pre-determined rules, tasks, interactional patterns, and instructional methods and materials, that can be directly manipulated upon, prior to and during teaching and classroom management in order to facilitate learning, and prevent or reduce behavioural problems. These ecological manipulations have an indirect rather than direct intervention effect on classroom behaviours because they are antecedent to effective teaching and learning — intervention occurs through setting up the necessary conditions that facilitate or promote desired performance. For example, teachers can decide prior to teaching what types of rules they would like students to follow or whether they would like to use cooperative teaching methods for lessons.

Direct treatment strategies are those which are used to directly correct or shape student behaviour. These strategies are also considered short-term because they can be immediately applied and the impact of their effectiveness observed within a short period. Examples of direct treatment strategies are as follows:

- **Differential reinforcement** describes the provision of reinforcement or reward for desired behaviour and non-provision of reinforcement for undesired behaviour. For example, a teacher who praises students who raise their hands and ignores those who shout out their responses is giving differential reinforcement to different types of behaviour in order to encourage the desired behaviour of hand-raising and discourage shouting.
- **Punishment** refers to providing a consequence for an undesired behaviour. An example is a student who displays inappropriate

Table 1: An Intervention Framework

SHORT-TERM		INTERMEDIATE	LONG-TERM
Ecological Manipulations (more antecedents in nature)	Direct Treatment	Skills Training and Teaching	Life-Long Options/Quality of Life (more longitudinal)
<ul style="list-style-type: none"> • Settings • Classroom management setup (e.g. rule-setting) • Interactions • Tasks • Instructional Methods (e.g. large vs small group instruction, cooperative learning) • Predictability/choice/control/scheduling • Environmental Pollutants (e.g., noise, crowding) • Number and characteristics of other people 	<p>Consequences</p> <ul style="list-style-type: none"> • Differential reinforcement • Punishment, reprimands • Response cost, loss of privileges, over-correction, time-out • Positive reinforcement, shaping • Token economy, contingency contracting • Natural contingencies <p>Crisis Management</p> <ul style="list-style-type: none"> • Physical restraint/guidance <p>Other</p> <ul style="list-style-type: none"> • Medication adjustments, dietary changes 	<ul style="list-style-type: none"> • General skills building • Independence development • Functional alternative skills training (e.g. teaching a more appropriate way of asking for help or attention) • Functionally related skills (e.g. engaging in other activities besides asking for attention) • Teaching coping and tolerance • Self-management (includes self-monitoring, self-recording, self-evaluation, self-reinforcement) • Counselling 	<ul style="list-style-type: none"> • Person-centred planning for students-at-risk • Transition planning • Opportunities for skill expansion & increasing life opportunities (e.g. supported employment) • Community integration • Building friendships and networks • Improving aspects pertaining to quality of life • Collaborating/working with parents and other professionals (e.g. other agency professionals)

behaviour and is scolded as a result. Hence, reprimand is a form of punishment. Caution should however be used in punishing students. If it is at all possible, the reasons behind students' inappropriate behaviour should be ascertained before punishment is meted out. The emotional and/or physical impact of punishment on the student should also be considered.

- **Response cost** is the forfeiture of something desirable, such as recess time, when undesired behaviour is displayed.
- **Over-correction** is a strategy that requires the person who displays an inappropriate behaviour to perform the desired alternative behaviour a number of times, to learn the more appropriate alternative. For example, a student slamming his or her desk may be asked to quietly close the desk a number of times. Like punishment, the appropriateness of over-correction for individual students should be considered.
- **Token economy** refers to the use of tokens, such as points or checks. Students can earn tokens through the performance of desired behaviour and exchange them for rewards or privileges.
- **Contingency contracting** is a procedure that uses contracts to draw up a mutually agreed upon plan by the teacher and student(s) to manage behaviour and earn desired reinforcers.
- **Time-out** refers to the removal of reinforcement from the student. In classrooms this can be done with a time-out seat or corner or reinforcing peers to ignore.
- **Natural contingencies** are natural consequences that take place without the teacher intentionally correcting undesired behaviour. For example, a student who does not pay attention in class and misses out on a much desired activity that was announced during that class can be said to have experienced a natural contingency: knowing about the much desired activity is contingent on the student paying attention in class.

Direct treatment strategies can be used in a proactive as well as in a reactive manner. For example, a teacher can begin the school year by positively reinforcing appropriate behaviour among students by praising and encouraging such behaviour when these are observed. Another teacher may not praise positive behaviour but react only to undesired behaviour by reprimanding students. More information on

these direct treatment strategies can be found in texts such as Walker and Shea (1995). Short-term intervention also includes the use of crisis management strategies, such as physical restraint or guidance for students who get out of control, or monitoring the effects of medication on the performance of a student who may require medication to regulate seizures or allergies.

Intermediate Intervention

Intermediate intervention strategies refer to those that emphasize skill acquisition and building in everyday classroom activities, and which take a longer time to implement than short-term intervention strategies. Most of what teachers do every day in classrooms focuses on helping students learn, acquire and enhance their knowledge and skills across a variety of social and academic subjects and domains. The knowledge and skills that teachers impart to students in their classroom according to school syllabi can be described as general skills building and independence development. These knowledge and skills enable students to become more competent in learning even more advanced knowledge and skills, and eventually become prepared for adult life. In addition to general skills building and independence development, other intermediate strategies, such as those outlined as follows, are often used to teach social skills.

- **Functional alternative skills training** refers to the training of skills alternative to those that teachers would like to see replaced. Students may bring to the class their own styles of communication and social skills that may not be considered appropriate in the classroom context. Examples of such behaviour include ways of asking for attention or help or dealing with conflicts that may be considered rude or inappropriate. Rather than squashing these attempts at communicating their needs and wants solely through a direct treatment strategy such as punishment, teachers can recognize the basis for these communication styles and teach more appropriate alternatives.
- **Functionally related skills training** describes the teaching of other skills related to particular needs of students. Some students like more attention from teachers and peers than others and may display such attempts at attention-seeking in inappropriate forms such as teasing or constantly drawing attention to self. Besides using functional alternative skills training, teachers can explore other possibilities related to how such attention-seeking behaviour can be reduced, such as engaging these students in activities that

can help fulfil their need for attention. For example, such a student may be encouraged to join the school's theatrical and drama club to learn new skills and to satisfy his or her need for greater attention.

- **Counselling**, provided teachers are trained in this aspect, can be used to address emotional and behavioural problems.
- **Teaching coping and tolerance** can be used for students who may not be able to handle their emotions well. Teaching students to stop and think before their next action in an emotionally provoking or charged incident can be of value to those who have trouble with reacting appropriately to their emotions. Teaching about tolerance to those who are different or who come from different backgrounds in school or community settings, such as students with disabilities, are also important skills that students can learn in their school education.
- **Self-management strategies** can be taught to students to regulate their own behaviour. These are defined as procedures that involve teaching students to engage in some self-directed behaviour (e.g. self-monitoring, self-evaluation) to improve other appropriate academic and social behaviour (e.g. adhering to class rules; see Cole & Bambara, 1992). Self-management strategies have been shown to successfully mediate a variety of behaviour and academic problems exhibited by students of all ages in school settings. For example, in a study by McLaughlin (1983), self-monitoring of attention was implemented with three students who were labelled behaviourally disordered. These pupils were taught to self-monitor their on-task behaviour whenever they remembered to do so, without using cueing devices or external prompts. Results indicated that self-monitoring increased each pupil's on-task behaviour during mathematics, spelling and handwriting. For a review of self-management strategies, please refer to Lam & Lim (1999).

Long-term Intervention

While short-term and intermediate interventions are more concerned with regulating everyday teaching and behavioural concerns within the school context, long-term intervention purposefully seeks to examine the future life possibilities of particular students, dares to create a desirable vision for their lives and makes plans to realize such a vision. Long-term intervention is necessary for those students who may not succeed in life opportunities through the regular education system but

are nevertheless in the regular education system. Such students may be considered as students at-risk because of particular learning and behavioural concerns. To ensure as bright a future as possible for them, a person-centered plan (Lim 1998) can help prepare them for a more definite future, based on their own abilities and strengths that will help them achieve as good a quality of life as possible. Such a person-centered approach can include plans to help such students make the transition to post-school adult life and independent community living. Other long-term intervention include building a network of relationships, friendships and support that will help see the student through the school and adult years. Such long-term efforts usually require the cooperation and coordination of teachers, community agency personnel, vocational centers, family members and other community members who can work together to safeguard the future of these students.

CONCLUSION

This paper describes a multi-component intervention framework that teachers can use to understand the role of different strategies and how they can be used for learning and behavioural concerns. This framework can be used for students who come from regular schools as well as special schools. Teachers can choose to develop appropriate individualized intervention packages based on selected components from the framework for student(s) from either special or regular schools. It is important to note that the different strategies, whether they are short-, intermediate- or long-term, are not mutually exclusive. For example, positive reinforcement (direct treatment strategies) can be used with skills training and teaching strategies (intermediate strategies). The different strategies in the framework can be used simultaneously and complementarily. This framework also highlights that teaching and behaviour management are not separate activities that teachers engage in but that they can be integrated to address learning and behavioural concerns.

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