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# **E**nhancing Special Education Staff Learning and Development

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## **P**URPOSE

This article examines the relationship of three factors that affect special education staff's management of children and adults with disabilities — staff's approach to learning about their work and problem solving (learning approach), their belief in their ability to affect their learners' performance and behaviour (efficacy), and their general sense of personal empowerment (locus of control). These factors have been found to correlate with staff effectiveness. Thus, an understanding of these factors can guide organizations to better support staff learning and development. Implications for improving the quality of teaching and learning within training programmes, schools, and service organizations are discussed.

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## **L**EARNING APPROACH

There are three main types of learning approaches reported in studies examining learning— deep, surface, and achieving (Biggs 1987). Deep approaches to learning attempt to integrate new material into existing frameworks and help develop problem-solving skills in novel situations. Surface approaches are characterized by attempts to reproduce or regurgitate the material with little integration with existing frameworks. The achieving approach relies on adapting to processes that are necessary to succeed in the performance of what is assessed. Students using achieving approaches are considered highly adaptive in that they can use surface or deep strategies to succeed (Entwistle, Entwistle & Tait 1991). Many teacher education programmes have been reported to contain many features of instruction and performance which fail to promote, on the part of teachers, the kind of problem-solving skills which would enable them to implement solutions to novel problems (Gibbs 1992). Deep learning approaches appear to help develop problem-solving skills in novel situations.

The approach to learning taken by students is heavily influenced by personal intention and the learning context. Gibbs (1992: 154) stated that:

*The features of courses which are most likely to be found where students tend to take a surface approach are a heavy workload, relatively high class-contact hours, and excessive amount of course material, a lack of opportunity to pursue subjects in depth, a lack of choice over subjects and a lack of choice over the method of study, and a threatening and anxiety provoking assessment system.*

Environments that encourage deep learning are those that avoid conditions that encourage surface learning. Features of environments which encourage deep learning include using cooperative learning, relating to pupils on an affective as well as on a cognitive level, providing choice and flexibility, and assessing pupil performance through processes that are reflective (Entwistle & Tait 1991).

## EFFICACY

Efficacy has been reported in the research literature to have a strong relationship with teacher effectiveness (e.g. Ashton & Webb 1986; Gibson & Dembo 1984). Two factors of efficacy have been identified (Gibson & Dembo 1984). The first is General Teaching Efficacy which refers to a teacher's belief that teachers would generally be able to teach most children regardless of home background. The second is Personal Teaching Efficacy which is described as the teacher's belief in his/her ability to affect student performance and behaviour.

Bandura (1982) reported that individuals with high efficacy beliefs related to a specific task (such as teaching), show greater willingness to engage in the task, persist in the face of difficulties, and use a variety of problem-solving strategies, hence increasing the likelihood for success with the task. On the other hand, individuals with lower efficacy beliefs tend to give up more easily in the face of difficulty while performing a particular task and demonstrate lower success rates. Low personal efficacy has been linked to teacher burnout (Labone 1995). Studies have shown a consistent relationship between teaching efficacy and student performance and outcomes (e.g. Wolfolk & Hoy 1990).

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## LOCUS OF CONTROL

Another variable that influences the teaching and learning process is locus of control. Locus of control appears to be strongly linked to efficacy. While efficacy is particularly specific to performance in situations and tasks, locus of control is a more stable and generalized orientation towards personal empowerment. Sadowski & Woodward (1983) reported that teacher locus of control has to do with the teachers' beliefs about their own ability to influence pupil performance and classroom events. That is, teachers with a greater internal locus of control tend to attribute performance and outcomes more to their own efforts and abilities than to externally controlled events or luck.

Studies have shown a strong relationship between teachers having an internal locus of control and effective instruction (Brophy 1976), adaptiveness to new techniques (Berman & McLaughlin 1977), greater democracy within classrooms (Rose & Medway 1981), and sense of responsibility (Soh 1985, 1988). In addition, pupils of these teachers tended to see their classrooms as being more motivating or conducive to learning (Decharm 1976; Deci, Nezlek & Sheinman 1981; Sadowski & Woodward 1983). Other studies have examined the relationship between teacher burnout and teacher locus of control. Lunenburg & Cadavid (1992) found that teachers who rated themselves as being more burned out were more likely to have an external locus of control and a custodial orientation towards the control of pupils.

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## RESEARCH FOCUS

Learning approaches, efficacy and locus of control are variables shown in the research literature to affect the teaching and learning process. The nature of the connections of these three variables was only recently explored when Gordon *et al.* (1995) demonstrated a positive relationship between high efficacy, an internal locus of control, and deep approach for pre-service early childhood students enrolled in an Australian university. Their findings also highlighted a weak inverse relationship between students with deep and achieving approaches, with students with external locus of control, and a significant relationship between low general teaching efficacy and the use of surface strategies.

For our study, we wanted to explore the nature of the relationship between these three variables for in-service special education student-

teachers in the Singaporean context. Since these student teachers were already full-time teaching staff in special schools and centres for individuals with disabilities, we were interested in the various aspects of their care and management of persons with disabilities (hence their staff effectiveness): their approach to learning about their work and problem solving (learning approach), their belief in their ability to affect their learners' performance and behaviour (efficacy), and their general sense of personal empowerment (locus of control). As these variables have been shown in the literature to correlate with staff effectiveness, their understanding can provide organizations ways to better support staff learning and development. Implications for improving the quality of teaching and learning within training programmes, schools, and service organizations are included in the discussion.

## **METHOD**

### **PARTICIPANTS**

The participants were 21 second year student teachers enrolled in the Diploma in Special Education Programme. There were 14 females and 7 males among them. All of them were also full-time teachers in schools and centres catering to the needs of people with disabilities.

### **PROCEDURE**

All the participants were administered the Study Process Questionnaire (Biggs 1987), the Academic Locus of Control Scale, a sub scale within the Multidimensional-Multiattributonal Causality Scale (Lefcourt 1981), and the Teacher Efficacy Scale (Gibson & Dembo 1984) in one sitting. These questionnaires took a total of approximately 45 minutes to complete.

### **RESULTS**

The relationships between these variables are described in the correlation matrix (Table 1). Significant relationships are indicated by an asterisk. Participants who use deep approaches were less likely to have an external locus of control ( $r = -0.5345$ ,  $p < 0.05$ ) and were more likely to have an internal locus of control ( $r = 0.4595$ ,  $p < 0.05$ ). High personal teaching efficacy was related to the use of deep approaches ( $r = 0.4278$ ,  $p < 0.05$ ). Participants who use achieving approaches demonstrate the highest level of internal locus of control ( $r = 0.7057$ ,  $p < 0.05$ ). These results show that as internal locus of control increased,

so did the likelihood of the use of deep and achieving approaches to learning. Conversely, as external locus of control increased, so was the likelihood of not using deep and achieving approaches. In addition, as personal teaching efficacy increased, so did the likelihood of using deep approaches to learning.

**Table 1:** Correlations of Learning Approaches, Locus of Control and Teaching Efficacy

Learning Approach	Ext. LOC	Int.LOC	GTE	PTE
Deep Approach	-0.5345*	0.4595*	-0.2532	0.4278*
Achieving Approach	-0.3862	0.7057*	-0.2125	0.2795
Surface Approach	0.1065	0.0914	0.1725	0.0076

Number of cases: 21    2-tailed. Signif: \*.05

## CONCLUSION AND IMPLICATIONS

The correlation results obtained in this study for local in-service special education student teachers show a significantly positive relationship between using deep approaches to learning, internal locus of control, and personal teaching efficacy. These results are similar to those obtained by Gordon *et al.* (1995) in their study on pre-service early childhood teachers in an Australian university. Hence, the results of our study provide added support to the idea that enhancing conditions for one or more of the three variables affecting learning is likely to have positive impact on the other variables. Since these variables represent and are influenced by similar and different aspects of the learner and learning conditions, staff effectiveness can be enhanced through designing learning conditions that promote deep approaches, higher teaching efficacy, and a greater internal locus of control. The following are a number of implications drawn from the research literature on these three variables on ways to enhance and support professional development and staff learning:

- Allow autonomy and freedom to negotiate areas for personal and professional development. Allowing autonomy and choice to address selected and negotiated concerns can promote self-responsibility and self-directed learning while engaging learners with greater intrinsic interest and motivation.

- Form cooperative and collaborative teams comprising of mentors, peers, colleagues whose roles are to assess, dialogue and support each others' performance in accomplishing selected goals. Such teams can be useful in facilitating individual and group learning experiences and ownership towards managing responsibilities.
- Be careful not to overwhelm or overload learners with excessive tasks or assignments and intense time pressures so as to discourage efficacy or learning in an in-depth manner. Time needs to be provided for reflection and appraising the value of tasks.
- Align relevant and challenging tasks and assignments with appropriate assessment and evaluation procedures to reinforce desired learning outcomes such as in-depth learning and self-reflection.
- Encourage learners to learn about how they learn. This involves examining their own personal and professional intrapersonal and interpersonal characteristics and styles, such as ways in relating to self and others, and how these aspects influence task and problem-solving orientation and role responsibilities.
- Support an open and flexible organisational structure where new ideas, creative problem-solving, dialogue among learners, initiative and decision making are recognised and encouraged. Try to avoid a rigid, bureaucratic and authoritarian structure where rigid norms and severe punishment breed anxiety over decisions made and inhibit dialogue and initiative.

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