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## A Study on Collective Teacher Efficacy in Low Performing Indian Schools

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**Abstract:** *Collective Teacher Efficacy is the collective belief of teachers in their ability to positively affect students. In this article we examine the status of collective teacher efficacy and its importance in Indian Schools as the challenge of low performing schools continues to rear its ugly head in India and in many other developing countries as well. The responses to low performance differ from country to country, but none of these have included the enhancement of collective teacher efficacy in their repertoire. Research shows that collective teacher efficacy is positively related to improved academic performance of learners. Schools with a higher sense of collective efficacy outperform schools with a lower sense of collective efficacy. Schools with high efficacy are characterised by strong work ethic, and teachers who persist in the face of difficulty. Besides, teachers in these schools are more persistent in their efforts, plan more, and view failure as a temporary set-back that does not discourage them. Therefore, if principals and their management teams could find a way to enhance collective teacher efficacy, the challenge of low-performing schools may be overcome. Keeping this in consideration, a quantitative research was conducted with the aim of determining the strength of collective teacher efficacy in low performing India schools. Ten randomly selected Indian schools were involved in the research and in each selected school all the teachers were involved. Data was collected using a questionnaire. The questionnaires were delivered and collected in schools by the researchers. Data was analysed using descriptive statistics, frequencies, percentages and mean scores. The results show that collective teacher efficacy in these schools is medium to high pertaining to group competence, but lower in task analysis.*

**Keywords:** *low-performing school; collective teacher efficacy; task analysis; teacher efficacy; management; principal; school*

### 1. INTRODUCTION

In modern time India is desperately struggling to secure quality education for the whole country as it promised to offer to its vast 1.21 billion populations in Right to Education Act (2009). Almost every states and UTs have issued strict guidelines to conduct school inspections so as to replicate good academic practices in a huge number of low performing schools and bring such schools on track. To Indian government as well as all over the world especially to third world countries, low-performing schools remain a challenge throughout the recent decade. Most governments react by offering more money to uplift low-performing schools in the belief that poverty and lack of resources are the major contributing factors to low performance (McColskey & Monrad, 2004). In the United States of America (USA), low-performing schools are placed under sanctions such as dismissal of the principal, closure of the school, and re-opening of the school as a private school (Woods & Levačić, 2002). Low student achievement and a lack of improvement were the most common factor leading to a school winding up in USA. In South Africa, the government prefers to introduce accountability measures such as the Integrated Quality Management System (Education Labour Relations Council, 2003). In India also, low performing schools are being given highest priority for inspection because such schools need immediate remedial measures. All these measures, however, have had limited success only in turning around low performing schools and could not achieve the desired level of performance.

Past studies cited a number of reasons for low performance of schools. In low-performing schools, the principal works in isolation, the School Management Committee does not meet regularly, there are no subject heads, and where these subject heads are found, they seldom meet for purposes of planning. The challenge seems to lie with the management of the school where teaching is not effectively supervised (Legotlo, Maaga, Sebego, Van der Westhuizen, Mosoge, Niewoudt & Steyn, 2002). This implies that school management tolerates poor teaching, which

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results in poor academic achievement (Woods & Levačić, 2002). However, teachers in these low performing schools seem to exhibit a weak teacher efficacy and the school as whole has a weak collective teacher efficacy. Teacher efficacy refers to the individual teacher's belief in his/her capacity to affect student performance (Cheung, 2008; Erawan, 2010; Yeo, Ang, Chong, Huan & Quek, 2008). Rangraje, Van der Merwe, Urbani and Van der Walt (2005) come to the conclusion, after analysing the work of Tschannen-Moran, Hoy and Hoy (1998), that "teacher efficacy can be conceptualised as teachers' belief that factors under their control ultimately have greater impact on the results of teaching than do factors in the environment or in the student-factors beyond the influence of teachers." Collective teacher efficacy refers to the perceptions of teachers that their efforts as whole will have a positive effect on students (Goddard, Hoy & Hoy, 2004). Elaborating on this definition, Schechter and Tschannen-Moran (2006) indicate that collective teacher efficacy means that "teachers in a given school believe that they can make an educational difference to their students over and above the educational impact of their homes and communities." Collective teacher efficacy, therefore, involves the combined perceptions of the staff of a particular school. It is a product of interaction between group members and the emergent property is more than the sum of individual members (Goddard et al., 2004). Although the concepts teacher efficacy and collective teacher efficacy influence each other reciprocally, the concepts nonetheless differ. While teacher efficacy uses the individual as the unit of analysis, collective teacher efficacy uses the teaching staff or school as its unit of analysis (Molale, 1995). John Hattie and his team have presented Collective Teacher Efficacy (CTE) as the "new number one" influence related to student achievement several times, e.g. at the Annual Visible Learning Conference (2016) or the Collaborative Impact Conference 2017. Although Hattie's latest published list of 195 effects in *The Applicability of Visible Learning to Higher Education* (2015) puts CTE only in second place, its effect size of  $d=1.57$  is still huge: it is more than two times bigger than that of feedback ( $d=0.72$ ), and almost three times bigger than the effect of classroom management ( $d=0.52$ ).

In the broadest sense, "teacher efficacy," which is sometimes called "teaching efficacy", refers to teachers' beliefs about their ability to influence student outcomes. Influenced by locus of control theory (Rotter, 1966), teacher efficacy is sometimes divided into general teacher efficacy and personal teacher efficacy. General teacher efficacy means teachers' beliefs in the ability of teachers in general to influence student outcomes (teachers can make a difference); personal teacher efficacy means teachers' beliefs about their own ability to affect student outcomes. More consistent with Bandura's theory of self-efficacy (Bandura, 1977, 1997), teacher efficacy is also often divided into outcome expectancies and efficacy expectancies (Enochs, Riggs & Ellis, 1993). Outcome expectancies are teachers' beliefs about the effects that specific teaching actions have on students, and efficacy expectancies are teachers' beliefs about their own ability to execute specific teaching actions. Cherniss (1993) has suggested that teacher efficacy should consist of three domains: Task (the level of the teacher's skill in teaching, disciplining and motivating students); Inter-personal (the teacher's ability to work harmoniously with others, particularly service recipients, colleagues and direct supervisors) and Organization (the teacher's ability to influence the social and political powers of the organization). Cherniss (1993) did not elaborate on his proposed conceptualization beyond its basic definition. In the context of the present study, we dealt with personal and general efficacy: i) Personal teaching efficacy is the teachers' own expectations that they will be able to perform the actions that lead to students learning and ii) General teaching efficacy is the belief that the teacher population's ability to perform these actions is not limited by factors beyond school control.

Teacher efficacy discussions usually center on two categories of teachers. That is, teachers with substantial confidence in their efficacy are described with terms such as confidence, a positive sense of teacher efficacy, or high teacher efficacy. Those with moderate or low levels of confidence in their efficacy are often labelled as having less confidence, doubting their efficacy, having low teacher efficacy, or having a less positive sense of teacher efficacy. Teachers with a positive sense of teacher efficacy believe they can influence student outcomes; teachers with a less positive sense of teacher efficacy believe there is little that can be done to affect student outcomes, or that they personally lack the skill to do so. Hence, Schechter and Tschannen-Moran (2006) point out that, unlike teacher efficacy, which is the attribute of the individual teacher, collective teacher efficacy is a group attribute that is more than an aggregate of individual teachers' self-efficacy beliefs. Moreover, teacher efficacy beliefs are based on individual perceptions whereas collective teacher efficacy is based on the combined perceptions of the teachers in a school. Since the late 1970s, researchers have considered teacher efficacy -teachers' beliefs in their ability to affect

student outcomes- to be a crucial factor for improving teacher education and promoting educational reform (Ashton, 1984; Berman, McLaughlin, Bass, Pauly & Zellman, 1977; Goddard, Hoy & Woolfolk Hoy, 2000; Ramey-Gassert & Shroyer, 1992; Ross, 1998; Scharmann & Hampton, 1995; Wheatley, 2002). Some scholars have even concluded that reforms that do not address teacher efficacy may be doomed (e.g. DeMesquita & Drake, 1994; Sarason, 1990 as cited in Wheatley, 2002). In all such discussions of the role of teacher efficacy in educational improvement, teacher efficacy (i.e., confidence in one's teaching efficacy) has been viewed as the appropriate goal (Ross, 1995; Soodak & Podell, 1996). Hence, the concept of teacher efficacy has become a pillar in the research on teacher beliefs (Fives, 2003). While teachers' sense of efficacy has been studied and discussed extensively in western countries, there is little perhaps no research has been carried out concerning teachers' efficacy beliefs in Indian context and perhaps no research has been done comparing Indian teachers' efficacy beliefs to their peers at developed western countries. This effort may reveal possible differences and similarities between teachers of these countries with respect to teacher efficacy beliefs. Understanding teachers' efficacy beliefs in different contexts would be useful to generate further insights into this important concept. The purpose of this paper is therefore to investigate the state of collective teacher efficacy in low performing Indian schools. The overall aim is to establish the importance of collective teacher efficacy towards improved learner academic performance in schools. The purpose also include an investigation of demographic variables which associate more with teacher efficacy, that is, gender and years of teaching experience.

## **2. ADVANTAGES OF TEACHER EFFICACY**

Teacher efficacy has been found to be one of the important variables consistently related to positive teaching behavior and student outcomes (Gibson & Dembo, 1984; Ashton & Webb, 1986; Enchos et al., 1995; Woolfolk & hoy, 1990; Henson, 2001; Ross, 1994). Research on the efficacy of the teachers suggests that behaviours such as persistence at a task, risk taking, and the use of innovations are related to degrees of efficacy (Ashton & Webb, 1986). For example, highly efficacious teachers are more likely to use open - ended, inquiry, student- directed teaching strategies, while teachers with a low sense of efficacy were more likely to use teacher - directed teaching strategies such as lecture or reading from the text book. Research indicates that students generally learn more from teachers with high self-efficacy than those students would learn from those teachers whose self - efficacy is low. (Cakiroglu et al., 2005). Ross (1994) reviewed eighty- eight studies of both antecedents and consequences of teacher efficacy. Low efficacy teachers spent almost 50% of their time in small group instruction, while high efficacy teachers spent only 28% of their time in small groups (Edward et al., 1996).

Other advantages of high efficacy have also been reported. High personal teaching efficacy correlated with reading achievement and with achievement in language and mathematics (Tracz & Gibson, 1986). Teacher with high efficacy exhibited less stress and higher internal locus control than low efficacy teachers (Greenwood, 1990), and teacher with high efficacy used solution - oriented conflict message strategies (Grafton, 1993). High teacher efficacy has also linked with overall school effectiveness (Brookover & Lezotte, 1979 as cited in Edward, 1996), the use of fewer control tactics (Ashton & Webb, 1986), greater parent support (Hoover, 1987), and higher levels of use of cooperative learning (Dutton, 1990 as cited in Edward, 1996). Teacher holding high personal efficacy beliefs were more likely to emphasize the role of the teacher and the instructional program when explaining why students were successful. They also deemphasized the effects of the home. (Hall et al., 1992). Teacher efficacy has also been positively associated with factors related to reform - oriented education, including greater use of hands- on teaching method and a more humanistic classroom control orientation (Rosoff & Hoy, 1990).

## **3. PREDICTORS OF TEACHER EFFICACY**

Before we entered into our practical research study we made a in-depth study into past researches to find out the specific predictors of teacher efficacy which are able to effect the teacher efficacy. Some of these studies have examined the relationship of the teacher efficacy construct with gender (Haydal, 1997; Wittmann, 1992; Anderson, Greene & Loewen, 1998; Lee, Buck & Midgley, 1992; Rowan & Cheong, 1992; Riggs, 1991). These researches indicated that female reported higher efficacy in elementary school settings, in higher school, and in special education. While males showed high efficacy when asked about their confidence in teaching subject, for example, in science subject which tends to be more of a male -dominated subject. Several studies have been conducted investigating the effect of experience on teacher efficacy. Dembo and Gibson (1985) found that pre-service teachers

had the highest teaching efficacy (teachers can make difference), and that teaching efficacy declined slightly with experience. In a study by Hoy and Woolfolk (1993), teachers declined slightly in teaching efficacy as they became more experienced. On the other hand, teachers increased in personal teaching efficacy (I can get through to even the most difficult students) with experience. Campbell (1996) reported that experience proved to be related to the development of teacher efficacy. Higher teacher efficacy scores also linked with higher age, although teacher who changed schools or experienced disruptive events tended to decrease efficacy (Huguenard, 1992; Coladarci & Breton, 1991; Taimalu & Oim, 2005). Other researchers have explored the effects of higher education on teacher efficacy. Finding by Hoy and Woolfolk (1993) indicated that educational level predicted personal teaching efficacy, but not general teaching efficacy. In a study by Taimalu and Oim (2005) revealed teacher efficacy beliefs depend on teacher's age along with other teachers characteristics. Brissie (1987) (cited in Edward, 1996) found a slight positive correlation between teacher efficacy and higher degrees. Campbell (1996) reported a significant relationship between teacher efficacy and increasing age. In addition several studies have examined the relationship of teacher efficacy with grade taught (Larsen, 1996; Petrie & others, 1995, Taylor, 1992), classroom characteristic and student behaviour (Emmer & Hickman, 1991), work with special needs students (Stanovich & Jordan, 1998), and job satisfaction (Fritz et al., 1995) etc. According to Van der Westhuizen, Mosoge, Swanepoel and Coetsee (2005), many variables influence student achievement, but none is more powerful than the educator in class. Goddard et al. (2004) contend that efficacy of teachers is a powerful construct, which is associated with student achievement. Therefore, if principals and their management teams could find a way to enhance teacher efficacy and collective teacher efficacy, the challenge of low-performing schools may be overcome. A school's sense of collective efficacy can therefore stimulate high levels of academic improvement which can contribute significantly to the level of academic success of the school (Schechter & Tshannen-Moran, 2006). To this end, Schechter and Tshannen-Moran (2006) assert: "Collective teacher efficacy influences student achievement because greater efficacy leads to greater effort and persistence that result in better performance." A number of studies have linked collective teacher efficacy with improved student achievement (Cheung, 2008; Klaasen, Tze, Betts & Gordon, 2011; Tshannen-Moran & Barr, 2004; Yeo et al., 2008). Research by Brinson and Steiner (2007) shows that even when race, socio-economic status and gender are taken into consideration, collective teacher efficacy remains a powerful predictor of academic performance. The latter statement based on international studies, brings hope to most Indian schools which are burdened with structural and systemic challenges that hinder the academic performance of learners. Enhanced collective teacher efficacy holds promises that these challenges may be overcome.

#### **4. THEORETICAL FRAMEWORK**

Before we discuss the research methodology, we will consider the underlying theoretical framework of collective teacher efficacy. The concept of collective teacher efficacy itself is much older. It was introduced in 1990s by Albert Bandura and is rooted in his concept of self-efficacy (Bandura, 1993, 1997). The very crux of this theory is the existence of human agency which defines the way people exercise some level of control over their lives. The exercise of control is related to the person's sense of efficacy in that a person believes in his/her capabilities to influence a course of action to produce a given goal (Goddard et al., 2004). Teachers in a school, for example, exercise some control over the functioning of the school and thus believe that they will influence the outcomes of the school through their actions. In dealing with collective teacher efficacy, the concept of human agency is replaced with the concept organisational agency, which refers to the combined control that members exert on the organisation. Organisational agency is based on the premise that individuals do not act in a vacuum or as "social isolates" but are influenced by the actions of the social group (Sorlie & Torsheim, 2011). This is reflected in the decisions that groups make in the light of their collective capability to reach a given goal. Thus, considering their capabilities, teachers in a school may decide to pursue high standards of teaching, attain excellence in sports and/or improve the academic performance of their learners.

Social cognitive theory posits four sources of efficacy-shaping information: social persuasion, vicarious experience, mastery experience and affective state (Goddard et al., 2004), of which social persuasion and vicarious experience can be beneficial to principals wishing to enhance collective teacher efficacy. Social persuasion seems likely to shape collective teacher efficacy, because the school is an organisation in which members interact on a daily basis (Tshannen-Moran & Barr, 2004). Through collective teacher efficacy, norms are developed in the school and teacher behaviour and actions are evaluated within the context of these norms. A robust collective teacher efficacy

influences the way in which teachers manage their classrooms, what expectations they have about student achievement, and how they teach. In schools with a high collective teacher efficacy teachers believe that all students are teachable regardless of their socio-economic backgrounds (Schechter & Tschannen-Moran, 2006). Teachers in a school with a high collective efficacy sense believe that they, not the environment, have the greatest influence on student achievement. Vicarious experience means that a sense of efficacy is gained from learning from other people (Sorlie & Torsheim, 2011). Teachers listen to and share stories of successes and failures with their colleagues whenever they meet in conference or workshops. Principals and their teachers may visit other schools to see how things are done at these schools and either copy or model what these other schools are doing. One of the strategies for sharing experiences is through school clusters. Research shows that clustering of schools has benefits for the individual and the school (Delport, A & Makaye, 2009; Giordano, 2008). Among the advantages of clustering schools, A Delport and Makaye (2009) identify exchange of expertise, forging of relationships between previously isolated teachers, collaborative problem-solving and improved staff development. Mastery experience is recognised as the most influential source of efficacy, and may include prior school performance (Zakeri, Rahmany & Labone, 2016). In essence, mastery experience refers to the belief that one can perform due to having mastered a previous task or venture. Ramos, Costa e Silva, Pontes, Fernandez and Nina (2014) posit that the affective state provides a source of collective teacher efficacy, which according to Bandura, states that people by judging their capabilities, partially place trust in their emotional state. An example is that of high levels of stress weakening group functioning, which lowers a sense of self confidence in the capabilities of other members. The literature reveals that very little research has been conducted on the construct of collective teacher efficacy in Indian context. The limited research that has been conducted in developed western countries, shows that collective teacher efficacy has been researched from different points of view, linking it in particular to student achievement (Goddard et al., 2004; Parker, Hannah & Topping, 2006) and the mediating factors to collective teacher efficacy (Bruce, Esmonde, Ross, Dookie & Beatty, 2010; Goddard & Skrla, 2006; Ross & Gray, 2006; Ross, Hogaboam-Gray & Gray, 2004).

## **5. PARTICIPANTS, RESEARCH METHOD AND DATA ANALYSIS**

A sample of 10 secondary schools was randomly selected and in each school all the teachers were participated in the study. The total number of participants were 214(N=214). Data collected from using questionnaires to the participants and for the research study necessary permission were taken from all concerned. Among the participants in the research 47.4% were males and 52.6% were females that exhibit a good gender distribution. 53.46% of the participants were in the age between 40 to 49 years, 25.20% were of 30 to 39 years, 15.17% were of 50 to 59 years, only a few 3.29% were 20 to 29 years and 2.88% were of 60 years and above. Of total participants 92.33% possessed a B.Ed-degree, followed by an Honours or a Masters qualification. A good number of participants 40.45% had 11 to 20 years teaching experience, followed by those with 0 to 10 years 33.35%, 21 to 30 years 21.26% and those with 31 years and more 7.44%. As far as the location was concerned, 51.75% were from township schools and 48.25% rural schools.

Researchers examining teacher efficacy scales have cautioned that wording off items may influence respondents. In particular, teachers may express different efficacy beliefs depending on whether the outcomes described are positive or negative (Guskey, 1982; Woolfolk & Hoy, 1990). We made certain to include both positively (+) and negatively (-) worded items in our scale. Finally following the model of collective teacher efficacy developed in this article, items were worded so that teachers would consider both Group Competence (GC) and Task Analysis (TA) in their efficacy assessment. This approach led to the identification of four types of items to assess collective efficacy beliefs: Group Competence/positive (GC+), Group Competence/negative (GC-), Task Analysis/positive (TA+) and Task Analysis/negative (TA-) (Goddard, Hoy & Woolfolk, 2000).

One of the most commonly used and well-researched instruments for assessing teacher efficacy is the Likert type scale developed by Gibbon and Dembo(1984). Although the original scale contained 30 items, researchers often use a 16-items version of the Gibon and Dembo instrument as a beginning point in developing our scale, adopting the items to adhere to the four categories described above (GC+, GC-, TA+, and TA-). One obvious difference between the Gibon and Dembo teacher efficacy instrument and the CTE instrument developed here is that Gibon and Dembo's measure used individually oriented items whereas our items are group oriented(Goddard, R. D., et al, 2000). The sample items below are examples of the four types of collective efficacy-

Teachers in this school are prepared enough to teach the subjects they are assigned to teach (GC+).

Teachers here don't have the skills needed to produce meaningful student learning (GC-).

The opportunities in this communities help ensure that these students will learn (TA+).

The lack of institutional materials and supplies in their school makes teaching very difficult (TA-).

The response format of our scale is the same 6-point Likert format ranging from totally agree to totally disagree. A t-test was also applied between rural and urban schools and between male and female respondents but no significant results emerged from the comparison.

## 6. RESEARCH FINDINGS

**Table 1:** Collected responses to General Competency questions (GC+)

| Statements   | Totally Disagree |     | Disagree |      | Agree |      | Totally Agree |      | Mean Score |
|--|------------------|-----|----------|------|-------|------|---------------|------|------------|
|  | f                | %   | f        | %    | f     | %    | f             | %    |            |
| 1. Teachers in this school are able to get through to difficult learners                 | 12               | 4.2 | 59       | 28.0 | 124   | 58.8 | 19            | 9.0  | 2.72       |
| 2. Teachers here are confident they will be able to motivate their learners              | 6                | 2.8 | 30       | 13.9 | 144   | 67.2 | 34            | 15.7 | 2.96       |
| 3. Teachers in this school really believe that every child can learn                     | 3                | 1.4 | 40       | 18.5 | 128   | 59.3 | 43            | 20.1 | 2.99       |
| 4. If a child doesn't learn something the first time, the teachers will try another way. | 8                | 3.7 | 48       | 22.4 | 121   | 56.5 | 37            | 17.3 | 2.83       |
| <i>N=214, Total f=651</i>  | 26               | 3.9 | 129      | 19.8 | 398   | 61.1 | 98            | 15   | -          |

## 7. STUDYING RESPONSES TO ITEMS ON GENERAL COMPETENCY (GC +)

Table 1 exhibits responses to the general competency (positive) statements show that the majority of the respondents agreed with the given statements, showing a relatively strong collective teacher efficacy (CTE). Responses agree and totally agree accounted for 77.1% of the responses. This shows that the majority of respondents agreed and totally agreed with the statements, thus showing a relatively strong CTE. This is supported by the mean scores which were all above the 2.50 cut-off point. Responses to the statements that 'teachers are confident that they will be able to motivate their learners' and that 'teachers in the school really believe that every child can learn' showed a strong CTE with mean scores that border on "agree" (2.96 and 2.99, respectively). Attention, however, is drawn to statement 1, which shows that 32.2% of the respondents disagreed and totally disagreed with the statement. This means that a sizeable number of respondents were of the opinion that teachers were unable to get through to difficult learners. The mean score for this item was also the lowest in this category (2.72), which shows a weaker CTE than for other items in this category. This weaker CTE could partly explain the low performance at the schools, which could be attributable to contextual factors in play.

**Table 2:** Collected responses to General Competency (GC-)

| Statements  | Totally Disagree |     | Disagree |      | Agree |      | Totally Agree |      | Mean Score |
|---|------------------|-----|----------|------|-------|------|---------------|------|------------|
|   | f                | %   | f        | %    | f     | %    | f             | %    |            |
| 5. If a child does not want to learn teachers here give up                            | 6                | 2.8 | 35       | 16.4 | 111   | 52.1 | 62            | 28.9 | 1.93       |
| 6. Teachers here do not have the skills needed to produce meaningful learner learning | 9                | 4.2 | 22       | 10.2 | 93    | 43.3 | 90            | 42.1 | 1.76       |
| 7. Teachers here do not have the skills to deal with learner disciplinary problems    | 18               | 8.3 | 40       | 18.7 | 113   | 52.1 | 43            | 19.8 | 2.16       |
| 8. Teachers in this school think there are some students that no one can teach.       | 11               | 5.1 | 41       | 19.2 | 99    | 46.3 | 63            | 29.4 | 2.13       |
| <i>N=214, Total f=856</i>   | 44               | 5.1 | 138      | 16.1 | 416   | 48.6 | 258           | 30.1 | -          |

## 8. STUDYING RESPONSES TO ITEMS ON GENERAL COMPETENCY (GC-)

Table 2 exhibits that the total responses for disagree and totally disagree accounted for 21.2% of responses, showing a low CTE. A total of 81% agreed and totally agreed that if a child does not want to learn, teachers give up

(statement 5). An even higher percentage (85.3%) indicated that they do not have the skills needed to produce meaningful learner learning (statement 6). This is in line with the low mean score of 1.76 for these statements, indicating a low CTE. The response to the statement that ‘teachers do not have the skills to deal with learner disciplinary problems’ (statement 12) confirms the research findings of Maphosa and Shumba (2010:395) that, with the banning of corporal punishment, teachers are struggling to maintain discipline in schools. A total of 71.9% indicated that teachers in their schools do not have the skills to deal with learner discipline problems. The percentage of respondents who disagreed and totally disagreed is, however, higher than the others in this category, indicating that almost 30% of the respondents still felt confident about their competency to deal with learner disciplinary problems.

**Table 3:** Collected responses to Task Analysis questions (TA+)

| Statements  | Totally Disagree |      | Disagree |      | Agree |      | Totally Agree |     | Mean Score |
|---|------------------|------|----------|------|-------|------|---------------|-----|------------|
|   | f                | %    | f        | %    | f     | %    | f             | %   |            |
| 9.Our learners come to school ready to learn  | 23               | 10.7 | 124      | 57.9 | 60    | 28   | 7             | 3.3 | 2.26       |
| 10.Home-life presents so many advantages that learners here are bound to learn        | 62               | 29   | 110      | 51.4 | 39    | 17.8 | 3             | 1.5 | 1.91       |
| 11.The opportunities in this country help ensure that our learners will learn         | 45               | 21   | 101      | 47.2 | 64    | 29.9 | 4             | 1.9 | 2.12       |
| 12. Teachers here are well prepared to reach the students they are assigned to reach. | 32               | 15   | 122      | 57   | 53    | 24.8 | 7             | 3.3 | 2.22       |
| <i>N = 214, Total f = 856</i>   | 162              | 18.9 | 457      | 53.4 | 216   | 25.2 | 21            | 2.4 | -          |

### 9. STUDYING RESPONSES TO ITEMS ON TASK ANALYSIS (TA+)

Table 3 presents a different view of the CTE in comparison with the general competency (GC). Of the total respondents, 72.3% disagreed and totally disagreed with the statements whereas only 27.7% agreed and totally agreed. The mean scores also showed low figures and range between 2.12 and 2.26, which is far below the expected 2.50. This is indicative of a weak CTE. According to the responses it seems the challenge lies with the community from which the learners come. For example, the statement that the ‘home-life presents so many advantages that learners are bound to learn’ (statement 10) had the lowest mean score of 1.91. Moreover, the statement that ‘the opportunities in this country help ensure that our learners will learn’ (statement 11) had a mean score of 2.12 with a total of 68.2% of the respondents disagreeing and totally disagreeing. It seems CTE becomes stronger where learners are concerned, as indicated by the statement that ‘our learners come to school ready to learn’ (statement 9); with a total of 31.2% in the agree and totally agree columns, and a mean score of 2.26 – in fact the highest mean score in this category.

**Table 4:** Collected responses to Task Analysis questions (TA-)

| Statements   | Totally Disagree |      | Disagree |      | Agree |      | Totally Agree |      | Mean Score |
|--|------------------|------|----------|------|-------|------|---------------|------|------------|
|  | f                | %    | F        | %    | f     | %    | f             | %    |            |
| 13.Learning in this school is more difficult because learners are worried about their safety   | 17               | 7.9  | 39       | 18.0 | 110   | 51.9 | 48            | 22.2 | 2.11       |
| 14.Drug and alcohol abuse in the community make learning difficult for learners                | 46               | 21.4 | 128      | 59.5 | 29    | 13.5 | 11            | 5.1  | 2.96       |
| 15.Learners here are just not motivated to learn   | 25               | 11.7 | 86       | 40.4 | 79    | 37.1 | 24            | 11.2 | 2.53       |
| 16. Teachers in this school do not have the skills to deal with student disciplinary problems. | 27               | 12.6 | 101      | 47.2 | 54    | 25.2 | 32            | 15   | 2.22       |
| <i>N = 214, Total f = 858</i>  | 115              | 13.7 | 354      | 41.3 | 274   | 31.9 | 115           | 13.4 | -          |

### 10. STUDYING RESPONSES TO ITEMS ON TASK ANALYSIS (NEGATIVE) (TA-)

Table 4 shows that responses between TA+ and those to TA- are in agreement. The total figure for disagree and totally disagree was 55%, whereas the figure for agree and totally agree was slightly lower at 45%. In this regard one would say the closeness of results here shows a medium CTE. However, the responses to items in this category stand in stark contrast to one another. For example, the statement that ‘learning in this school is more difficult

because learners are worried about their safety' (statement 13) showed a weak CTE with responses for agree and totally agree, totalling 74.1 percent. In contrast, the statement that 'drugs and alcohol abuse in the community make learning difficult for learners' (statement 14) showed a strong CTE with responses in the disagree and totally disagree anchors notching 80.9 percent.

### 11. DISCUSSION

The above responses clearly indicates to a high collective teacher efficacy (CTE) for general teacher competence and a low CTE for task analysis. Apparently, teachers believe in their competence to produce the desired results but are short-circuited by events and factors outside their control. The general expectation about CTE is that it should be strong even in the face of potentially limiting factors such as the home background of the learners. This finding is consistent with findings on teacher efficacy showing no difference whether it refers to individual beliefs or collective beliefs.

Teachers' beliefs in their general competence to produce the desired results, is somewhat surprising because of their differing qualifications. In fact, the highest mean scores are found in this category. Mosoge (2012) points out that some schools are staffed with unqualified and underqualified teachers whereas Spaul (2013) argues that teachers cannot teach what they do not know. What gives respondents their strong CTE in this category seems far-fetched. It is possible that the measures instituted by the several Indian states to improve performance in low performing schools, enhances the CTE of teachers. Mosoge (2012) concludes that lack of sufficient qualifications did not deter teachers from seeing themselves as competent. One would also conclude that the response is obvious, for no teacher would present himself or herself as incompetent. Thus it seems as though the low performance of the school must be sought elsewhere and not in their competence.

The responses to task analysis items produce intriguing results. While the responses for task analysis generally show a medium CTE, there are cases where it is high and where it is low. For example, the statement that 'learning in this school is more difficult because learners are worried about their safety' (statement 13) shows a weak CTE in that teachers believe that learners are worried about their safety. Thus, it is not surprising that the CTE would be weak for this item considering, the reports of violence in and around schools and perceptions of moral decay in schools and society.

It seems CTE becomes stronger where learners are concerned as indicated by the statement that 'our learners come to school ready to learn' (statement 9), with a total of 33.8% in the agree and totally agree columns, and a mean score of 2.26 – in fact the highest mean score in this category. The means cores also show low figures, and range between 1.91 and 2.26, which is far below the expected 2.50. This is indicative of a weak CTE. According to the responses it seems the challenge lies with the community from which the learners come. For example, the statement that the 'home-life presents so many advantages that learners are bound to learn' (statement 10 ) has the lowest mean score of 1.91, showing that the respondents do not consider home life to present advantages that would encourage learners to learn.

This implies that respondents strongly believe that they have the necessary skills to produce meaningful learning. The response to the statement that 'teachers do not have the skills to deal with learner disciplinary problems' (statement 7) indicates that respondents hold firm beliefs that they do not have skills to deal with learner disciplinary problems. This is in line with research findings (Maphosa & Shumba, 2010) that, with the banning of corporal punishment, teachers are struggling to maintain discipline in schools. It suggests that not enough has been done to equip teachers adequately to deal with issues of learner discipline in schools. However, CTE though being directly related to respondents' perceptions of performance at their schools as espoused in Bandura's Social Cognitive Theory, it is clear that contextual factors also play a role. This was also found in Ramos et al.'s (2014) study that contextual factors such as socio-economic disadvantages may also influence collective beliefs. This resonates with Zakeri et al.'s (2016) assertion that in recent years research focus is increasingly on teacher efficacy and the school context as is evident in the current findings.

However, the instrument itself has the limitation of probing the background of the learners and the community without relating it to the CTE of teachers. It may be argued that the respondents reported the situation in which

they find themselves honestly, without in any way reflecting on their CTE. On the contrary, it may be that the instrument connects factors of task analysis directly to CTE. The instrument could include questions such as: 'do you think community and learner factors inferred that the teachers found the task analysis factors to be more dominant on the outcomes than factors on general competence?'

## **12. RECOMMENDATION FOR BUILDING COLLECTIVE TEACHER EFFICACY IN SCHOOLS**

There is not a failsafe set of steps that school leaders can take to improve collective efficacy among teachers at any given school. Nevertheless, research does offer some guidance for leaders who want to prioritize their actions to ensure that they are focusing on interventions that have the highest likelihood of increasing collective efficacy. This issue brief will summarize what is known about the actions that principals can take to increase collective efficacy among their faculty. In a recent study involving 1,981 K-8 teachers, Goddard and Skrla (2006) found that contextual and demographic factors such as a school's socioeconomic status, the experience level of the faculty, and students' prior academic performance accounted for less than half (46%) of the differences in collective efficacy between schools. This suggests that there are several other factors at work in building collective efficacy that principals and district leaders can influence. Only in the last decade or so have researchers begun to look at specific actions that school or district leaders can take to improve collective efficacy among teachers. There are plenty of schools in India suffering for lack of CTE. These schools could not attain their desired standards only due to uniformity of perception among its teachers. So collective teachers' efficacy is an important factor when giving quality education to learners is the target. This emerging body of research, though still in its early stages, suggests that the following actions on the part of principals can improve collective efficacy:

- Build instructional knowledge and skills.
- Create opportunities for teachers to collaboratively share skills and experience.
- Interpret results and provide actionable feedback on teachers' performance.
- Involve teachers in school decision making.

## **13. CONCLUSION**

Richard Elmore's (2000) well-regarded monograph, *Building a New Structure for School Leadership*, argues that the key barrier to successfully and dramatically improving student performance is the fact that too many teachers are isolated and have little opportunity for professional collaboration with colleagues, the principal, or the district. Building collective teacher efficacy—by providing teachers with opportunities to build instructional knowledge and collaborate with colleagues, with feedback that is insightful and with a vision of success in which teachers are treated as sources of expertise—will allow leaders to transform their schools into organizations with strong collective efficacy and improved student performance. School leaders face many challenges, but helping to ensure that teachers have the instructional skills and the professional confidence they need to teach their students effectively is the most important challenge of all. Focusing on building collective efficacy can provide leaders a means to achieve this goal.

### **Limitations and future research**

Further research could be conducted to find the relationship between the community and learning factors to the general competency of teachers. Research can be conducted using inferential statistics to establish relationships between the variables of CTE in developing countries. Research using qualitative methods may unearth factors that account for the state of CTE in schools. It would also be interesting if further research could be conducted to find out if there is a difference in responses between high and low performing schools. The study was not without limitations. A greater response rate could have contributed to richer data which could be further supported by qualitative data gathering. A lack of research in this area in the country provided no basis for comparison for developing countries.

## **REFERENCES**

- Ashton, P. T. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education*, 35, 28-32.
- Ashton, P. T., & Webb, R.B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman

- Bandura A 1977. Self-efficacy: Towards a unifying theory of behavioral change. *Psychological Review*, 84(2):191–215. Available at <https://www.uky.edu/~eushe2/Bandura/Bandura1977PR.pdf>. Accessed 21 April 2018.
- Bandura A 1997. *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Brinson D & Steiner L 2007. Building collective efficacy: How leaders inspire teachers to achieve. Issue Brief, October:1–6. Available at <https://files.eric.ed.gov/fulltext/ED499254.pdf>. Accessed 7 April 2018.
- Bruce CD, Esmonde I, Ross J, Dookie L & Beatty R 2010. The effects of sustained classroom embedded teacher professional learning on teacher efficacy and related student achievement. *Teaching and Teacher Education*, 26(8):1598–1608. <https://doi.org/10.1016/j.tate.2010.06.011>
- Cakiroglu, J., Cakiroglu, E., & Boone, W. J. (2005). Pre-Service Teacher Self-Efficacy Beliefs Regarding Science Teaching: A Comparison of Pre-Service Teachers in Turkey and the USA *Science Educator*, 14, 31-40.
- Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout* (pp. 135–150). Washington, DC: Taylor & Francis.
- Cheung HY 2008. Teacher efficacy: A comparative study of Hong Kong and Shanghai primary inservice teachers. *The Australian Educational Researcher*, 35(1):103–123. <https://doi.org/10.1007/BF03216877>
- Delpont A & Makaye J 2009. Clustering schools to improve teacher professional development: Lessons learnt from a Zimbabwean case study. *Africa Education Review*, 6(1):96–105. <https://doi.org/10.1080/18146620902857608>
- Delpont CSL 2002. Quantitative data collection methods. In AS de Vos (ed). *Research at grass roots: For the social sciences and human services professions*. Pretoria, South Africa: Van Schaik
- Education Labour Relations Council 2003. Collective agreement number 8 of 2003: Integrated Quality Management System. Centurion, South Africa: Author. Available at <http://www.elrc.org.za/sites/default/files/documents/Collective%20Agreement%208%20of%202003.pdf>. Accessed 7 April 2018.
- Edward, J. L., & others. (1996). Teacher efficacy and school and teacher characteristics. ERIC Document Reproduction Service No. ED 397055
- Emmer, E, Hickman, J. (1991). Teacher efficacy in classroom management and discipline. *Educational and Psychological Measurement*, 51, 755–765.
- Enochs, L. G., Riggs, I. M., & Ellis, J. D (1993). The development and partial validation of microcomputer utilization in teaching efficacy beliefs instrument in a science setting. *School Science and Mathematics*, 93, 257– 261.
- Erawan P 2010. A comparison of teaching efficacy commitment to teaching profession and satisfaction with program effectiveness of teacher students under 5 year-program curriculum and those under 4+1 year-program curriculum. *European Journal of Social Sciences*, 14(2):250–261
- Fritz, J. J., Miller-Heyl, J., Kreutzer, J. C., & MacPhee, D. (1995). Fostering personal teaching efficacy through staff development and classroom activities. *The Journal of Educational Research*, 88, 200–208.
- Gibson, S., & Dimbo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76, 569–582.
- Giordano EA 2008. School clusters and teacher resource centres. Paris, France: UNESCO International Institute for Educational Planning. Available at <http://unesdoc.unesco.org/images/0015/001597/159776e.pdf>. Accessed 8 April 2017.
- Goddard R 2002. A theoretical and empirical analysis of the measurement of collective teacher efficacy: The development of a short form. *Educational and Psychological Measurement*, 62(1):97–110. <https://doi.org/10.1177/0013164402062001007>
- Goddard RD, Hoy WK & Hoy AW 2004. Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, 33(3):3–13. <https://doi.org/10.3102/0013189X033003003>

- Goddard RD & Skrla L 2006. The influence of school social composition on teachers' collective efficacy beliefs. *Educational Administration Quarterly*, 42(2):216–235. <https://doi.org/10.1177/0013161X05285984>
- Grafton, P.E.B. (1993). The relationship of selected school organizational environmental factors and beginning teachers' sense of efficacy (teacher efficacy) (Doctoral dissertation, Bowling Green State University, 1993). *Dissertation Abstract International*, 54/ 07A, AAD93-34553
- Greenwood, G.E., Olejnik, S.F., Parkey, F.W. (1990). Relationship between four teacher efficacy belief patterns and selected teacher characteristics. *Journal of research and development in Education*, 23, 102-106.
- Hall, B.W., Hines, C.V., Bacon, T.P., & Koulianos, G.M. (1992). Attributions that teachers hold to account for student success and failure and their relationship to teaching level and teacher efficacy beliefs. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco.
- HATTIE, J. (2015): *The Applicability of Visible Learning to Higher Education*. In: *Scholarship of Teaching and Learning in Psychology*, 1 (1), 79-91.
- HATTIE, J. (2016). *Third Visible Learning Annual Conference: Mindframes and Maximizers*, Washington, DC, July 11, 2016.
- Henson RK 2002. From adolescent angst to adulthood: Substantive implications and measurement dilemmas in the development of teacher efficacy research. *Educational Psychologist*, 37(3):137– 150. [https://doi.org/10.1207/S15326985EP3703\\_1](https://doi.org/10.1207/S15326985EP3703_1)
- Hoove Dempsey, K.V., Bassler, O.C., & Brissie, J.S (1987). Parent involvement: Contributions of teacher efficacy, school socioeconomic status, and other school characteristics. *American Educational Research Journal*, 24, 417-435.
- Huguenard, T. (1992). The relationship between teacher efficacy, certification and student achievement. (Doctoral dissertation, Baylor University, 1992). *Dissertation Abstract International*, 54-1-A, 147.
- Klaasen RM, Tze VMC, Betts SM & Gordon KA 2011. Teacher efficacy research 1998- 2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, 23(1):21–43. <https://doi.org/10.1007/s10648-010-9141-8>
- Larsen, P.E (1996). Relationship between selected measures of teacher and positive teacher behaviors (Doctoral dissertation, The Ohio University, 1996). *Dissertation Abstract International*, 57-7A, 2773
- Leedy PD & Ormrod JE 2005. *Practical research. Planning and design*. Upper Saddle River, NJ: Prentice Hall.
- Legotlo MW, Maaga MP, Sebege MG, Van der Westhuizen PC, Mosoge MJ, Niewoudt HD & Steyn HJ 2002. Perceptions of stakeholders on causes of poor performance in Grade 12 in a province in South Africa. *South African Journal of Education*, 22(2):113–118.
- Maphosa C & Shumba A 2010. Educators' disciplinary capabilities after the banning of corporal punishment in South African schools. *South African Journal of Education*, 30(3):387–399.
- Maree K & Pietersen J 2010. Sampling. In K Maree (ed). *First steps in research*. Pretoria, South Africa: Van Schaik.
- Masitsa G, Van Staden J, De Wet C, Niemann R, Heyns M, Brazelle R & Niemann S 2004. Management problems at under-achieving township secondary schools in the Free State. *Acta Academica*, 36(2):221–250.
- McColskey W & Monrad DM 2004. Assisting lowperforming schools in the Southeast. *International Journal of Educational Policy, Research and Practice*, 4(4):3–24.
- Mogonedwa MV 2008. Strategies for the management of low performing secondary schools in the North West Province. MEd dissertation. Potchefstroom, South Africa: North-West University
- Molale IS 1995. The management role of a circuit manager in the implementation of transformation policies with particular reference to the North-West Province. MEd dissertation. Mafikeng, South Africa: North-West University.

- Morrell PD & Carroll JB 2010. *Conducting educational research: A primer for teachers and administrators*. Rotterdam, The Netherlands: Sense.
- Mosoge M 2012. Teachers' perceptions about their own professionalism in the Lejweleputswa district, Free State province, South Africa. *Acta Academica*, 44(2):179-204.
- North West Department of Education 2001. Report on expected Grade 12 results at the end of 2001. Mafikeng, South Africa: Author.
- North West Department of Education 2004. Proposed strategies to improve Grade 12 results. Mafikeng, South Africa: Author.
- Onderi H & Croll P 2009. Teacher self-perceptions of effectiveness: A study in a district of Kenya. *Educational Research*, 51(1): 97-107. <https://doi.org/10.1080/00131880802704798>
- Parker K, Hannah E & Topping KJ 2006. Collective teacher efficacy, pupil attainment and socioeconomic status in primary school. *Improving Schools*, 9(2):111-129. <https://doi.org/10.1177/1365480206064965>
- Petrie, T.A., Hartranft, F., & Lutz, K. (1995) The relationship between teacher efficacy and administrative perception of effectiveness. *The High School Journal*, 78(2), 73-77.
- Ramos MFH, Costa e Silva SS, Pontes FAR, Fernandez APO & Nina KCF 2014. Collective efficacy beliefs: A critical review of the literature. *International Journal of Human and Social Science*, 4(7):179-188.
- Rangraje I, Van der Merwe A, Urbani G & Van der Walt JL 2005. Efficacy of teachers in a number of selected schools in KwaZulu-Natal province of South Africa. *South African Journal of Education*, 25(1):38-43
- Ross, J.A. (1994). The impact of an in-service to promote cooperative learning on the stability of teacher efficacy. *Teaching and Teacher Education*, 10, 381-394.
- Ross JA & Gray P 2006. Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement*, 17(2):179-199. <https://doi.org/10.1080/09243450600565795>
- Ross JA, Hogaboam-Gray A & Gray P 2004. Prior student achievement, collaborative school processes and collective teacher efficacy. *Leadership and Policy in Schools*, 3(3):163-188. <https://doi.org/10.1080/15700760490503689>
- Rosoff, B., & Hoy, W. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education*, 6, 137-148.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28
- Schechter C & Tschannen-Moran M 2006. Teachers' sense of collective efficacy: An international view. *International Journal of Educational Management*, 20(6):480-489. <https://doi.org/10.1108/09513540610683720>
- Sorlie MA & Torsheim T 2011. Multilevel analysis of the relationship between teacher collective efficacy and problem behaviour in school. *School Effectiveness and School Improvement*, 22(2):175-191. <https://doi.org/10.1080/09243453.2011.563074>
- Spaull N 2013. South Africa's education crisis: The quality of education in South Africa 1994-2011 (Report commissioned by CDE). Johannesburg, South Africa: Centre for Development and Enterprise (CDE). Available at <http://www.section27.org.za/wpcontent/uploads/2013/10/Spaull-2013-CDE-reportSouth-Africas-Education-Crisis.pdf>. Accessed 14 April 2018.
- Tracz, S.M., & Gibson, S. (1986). *Effects of efficacy on academic achievement*. Paper presented at the Annual Meeting of the Educational Research Association. California.
- Tschannen-Moran M & Barr M 2004. Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and Policy in Schools*, 3(3):189-209. <https://doi.org/10.1080/15700760490503706>
-

- Tschannen-Moran M, Hoy AW & Hoy WK 1998. Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2):202–248. <https://doi.org/10.3102/00346543068002202>
- Taylor, C.E. (1992). Teacher and principal perceptions of personal efficacy. *The High School Journal*.76, 60-66.
- Van der Westhuizen PC, Mosoge MJ, Swanepoel LH & Coetsee LD 2005. Organizational culture and academic achievement in secondary schools. *Education and Urban Society*, 38(1):89–109. <https://doi.org/10.1177/0013124505279959>
- Van Deventer I & Kruger AG 2003. An educator's guide to school management skills. Pretoria, South Africa: Van Schaik.
- Woolfolk, A.E., & Hoy, W.K. (1990). Prospective teachers'sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82, 81–91.
- Woods PA & Levačić R 2002. Raising school performance in the league tables (Part 2): Barriers to responsiveness in three disadvantaged schools. *British Educational Research Journal*, 28(2):227– 247. <https://doi.org/10.1080/01411920120122167>
- Yeo LS, Ang RP, Chong WH, Huan VS & Quek CL 2008. Teacher efficacy in the context of teaching low achieving students. *Current Psychology*, 27:192. <https://doi.org/10.1007/s12144-008-9034-x>
- Zakeri A, Rahmany R & Labone E 2016. Teachers' self and collective efficacy: The case of novice English language teachers. *Journal of Language Teaching and Research*, 7(1):158–167. <https://doi.org/10.17507/jltr.0701.18>