

**PROFESSORS  
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BORDERS**



# **Examining Collective Teacher Efficacy and Its Impact on Student Performance**

**Gabriel Inchausti**  
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## SUMMARY OF RESULTS

Student performance in the classroom is impacted by a variety of internal and external factors. While students enter the classroom with their own unique sets of capabilities, it is important to understand how teachers and their beliefs about students influence student performance. This paper examines how teacher beliefs about group efficacy influence student performance in the classroom. To analyze how teachers develop their perceptions on collective teacher efficacy (CTE), Inchausti utilizes the Goddard et al assessment of CTE and examines the four sources CTE. This paper also utilizes Inchausti's own case study conducted in South America, to evaluate how the use of CTE questionnaires can provide a greater understanding of how to improve collective efficacy in schools.

## 1.0 INTRODUCTION

Determinants of students' performance are multiple and not limited to what strictly happens during the class. Students enter into the classroom with a set of capabilities acquired previously at school, at home and in their community and engage during class hours in activities to further develop them. However, students and teachers do not only come to school with knowledge and skills, they also bring their beliefs and ideas about themselves and about what will happen in their interaction with each other. Students tend to see themselves as part of a group and adjust their behaviours to fit that image. Teachers also build images about students, and sometimes they involve judgements about what can and cannot be done in class. Some of those ideas have the potential of creating significant positive impact in the class dynamics and its outcome. What kind of beliefs about teaching contribute to great teaching? How can institutions help to develop these productive beliefs?

In this note, I will review how teacher beliefs about their own efficacy as a group can influence students' performance. Empirical evidence show that perceptions of faculty about their impact on students have a great positive influence in their individual performance and in the academic results of their students (Goddard, Hoy, & Hoy, 2000). I will also discuss the applications of these ideas and I will briefly comment the experience of putting some of them into action in urban South American schools.

## 2.0 DATA

### 2.1 The Formation Of Teachers' Beliefs

According to Tschannen-Moran and Barr (2004) “(c)ollective teacher efficacy refers to the collective self-perception that teachers in a given school make an educational difference to their students over and above the educational impact of their homes and communities.” (p.190) The concept exceeds the personal beliefs of own efficacy and relates to the ideas a professor holds about the interaction of students with him, and the rest of the teachers of the institution. Bandura (1993) saw in the system of beliefs of the school’s staff, elements that conform cultures that may have “vitalizing” or “demoralizing” effects on students and the functioning of the institution. These beliefs determine the resilience of teachers when dealing with failures and stress and is reflected in their effectiveness as professors.

Goddard, Hoy, and Hoy argue that teachers estimate their collective efficacy by assessing two dimensions: (1) how difficult it is to teach in a specific context (Task Analysis – TA), and (2) how good is the inventory of competences the collective has (Group Competence – GC). The assessment of the teaching task (TA) takes into consideration (i) the views of teachers on the abilities and motivation of students, (ii) the availability of teaching materials and physical facilities, and (iii) the characteristics of the extra-school community. On its side, analysing teaching competences (GC) refers to the evaluation that each professor does about the skills and abilities of their colleagues. From the joint assessment of the task and the competences, emerges the belief they hold about their efficacy as a group in impacting positively on students. To evaluate these beliefs, Goddard et al suggested a 21 question survey in a 6 degree Likert scale. The questions inquire about positive and negative aspects of the two dimensions: GC+: teachers in this school are well prepared, GC-: teachers in this school do not have the required skills, TA+: opportunities of the community ensure that students will learn, TA-: logistics in this school make difficult to teach properly<sup>1</sup>.

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<sup>1</sup> A shorter 12 item survey was validated by Goddard and Hoy including the following questions: GC (+): (1) Teachers in the school are able to get through to the most difficult students; (2) Teachers here are confident they will be able to motivate their students; (5) Teachers in this school believe that every child can learn. GC (-): (3) If a child doesn't want to learn teachers here give up; (4) Teachers here don't have the skills needed to produce meaningful student learning; (9) Teachers in this school do not have the skills to deal with student disciplinary problems. TA(+) (6) These students come to school ready to learn;(7) Home life provides so many advantages that students here are bound to learn; (10) The opportunities in this community help ensure that these students will learn. TA (-) (8) Students here just aren't motivated to learn; (11) Learning is more difficult at this school because students are worried about their safety; (12) Drug and alcohol abuse in the community make learning difficult for students here. All 12 questions are evaluated in a 1 to 6 likert scale with TA(-) and GC (-) reverse coded.

Evidence shows that Collective Teacher Efficacy, student performance, and many productive behaviours of professors have a direct and strong positive correlation. Schools with staff that report higher CTE have teachers that are more committed to their students and families, exhibit higher engagement with the institution where they work, report greater levels of satisfaction with their teaching positions, and are more likely to embrace institutional initiatives (Donohoo, 2018). Regarding students' performance, in their 2000 paper Goddard et al, presented evidence that an increase in one unit in Collective Teacher Efficacy leads to a 40% impact in standard deviation in student achievement. Some years later, in 2011, a meta-analysis conducted with 26 studies positioned this effect in 0,54 to 0,63 SD (Eells, 2011).

## **2.2 How To Grow Collective Efficacy**

The correlation between CTE and performance is robust, and the malleability of beliefs around it, inspired many interventions. In their seminal paper, Goddard et al identified 4 sources of CTE: mastery experiences, vicarious experiences, social persuasion and emotional states.

**Mastery experience-Stories of own success:** Past success is the primary source of conviction about own efficacy. Memories of success feed confidence and prove that things can be done. Although in groups with low performance it may be difficult to find those experiences, an institutional practice to find and give saliency to success stories can have a big impact on teachers. Sometimes, those stories target parents and students, but they are powerful for professors too.

**Vicarious experiences-Stories of success of other institutions:** Teachers can also find inspiration in stories of success that come from other institutions with whom they can relate. Creating workshops and promoting collective visits to know other school professors' success in dealing with difficult situations, can have an inspiring and motivational effect.

**Social persuasion-Shared convictions:** A third source of CTE is the social persuasion that is built in teachers when they are presented with powerful references on what to do and how to do it. The best way to do this is to provide useful and meaningful training and professional development. Building social persuasion through training requires that professors choose the content and the

speakers of the training sessions. The content of the training is as important as the shared conviction that competences learned are relevant to improve teaching skills.

Emotional states-Smart praise: Finally, to foster CTE it is key to understand the “state of the soul” of the faculty. Praising properly allows teachers to feel valued and helps them balance the good and bad outcomes they find with their students. Acknowledging hard work helps in building resilient emotional states in the faculty.

Although these initiatives can improve CTE, the first step in implementing a CTE based intervention is to measure the ex-ante beliefs of the staff. This creates a benchmark to measure effectiveness of future actions, but it also provides an enriching opportunity to exchange views between staff about how difficult is teaching to students coming to the institution and what improvements can be done. This open agenda discussion may raise some problems that cannot be easily solved. However, school leaders will be able to show improvement in some of the dimensions pointed at by the teachers.

## 3.0 RESULTS

### 3.1 Evidence From the Field

In an exploratory implementation of the CTE questionnaire in South American schools, teachers answers exhibit a rather “flat” distribution pattern reflecting their heterogeneity of views about their collective efficacy. Younger teachers are more negative than older ones, and this does not seem to be related to their experience as professors, but to their age. In addition, more time in the same school usually leads to a more positive view of the difficulties associated with the task. The wide range of perceptions that teachers have of the same educational context, and its relation to personal characteristics is evidence of the “malleability” of their views. Younger teachers who are new to the institution, may benefit from sharing views with older and experienced ones in ways beyond the exchange of skills and competences.

Another interesting finding has to do with the weight teachers put in socio-economic background as a determinant of academic success of students. In the schools surveyed, views of the faculty working in the same institution differed significantly in this field. In addition, there was no clear relation between CTE and socio economic indicators of the neighbourhood they serve. Although evidence of the relation between SES and academic performance is strong and ubiquitous in the literature, professors do not seem to share a common interpretation about the strength of this effect.

## 4.0 DISCUSSION

Beliefs of teachers about their collective efficacy can improve individual teacher performance with positive impact on students' academic outcome. School leaders can improve faculty confidence promoting the exchange of experiences and knowledge. However, in understanding the formation of those beliefs, it is important to measure CTE properly and take into consideration the mix of background and age of the staff. By designing contexts that promote Collective Teacher Efficacy and looking for a productive integration of professors with different backgrounds, institutions have an opportunity to stimulate beliefs that contribute to great teaching.

## 5.0 ABOUT THE AUTHOR

Gabriel Inchausti graduated in Economics from the University of the Republic (Uruguay). Gabriel has professional specialization in corporate finance and strategy and received his Masters Degree in Behavioural Sciences from the London School of Economics. He is a professor and lecturer in topics related to Behavioral Economics in Uruguay and Brazil, and is an active researcher in the field. His research focus is in the area of education and time preferences. Moreover, Gabriel served as the Executive Officer for a major South American beef group and the General Manager in an important media group in Uruguay. Currently, he is chairman of the board of a South American software company.

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