This study took an in-depth, global look at the entirety of the teaching practices of six elementary school teachers in Canada who are known to be highly motivating instructors. The study investigated the interaction between teaching practices and the change in elementary-school student motivation. Three teachers were chosen for their reputation as great motivators, while the other three were randomly selected in schools from the same sociological context; the students of these teachers also participated. Teachers were interviewed, their classes were observed, and their teaching materials were examined. Documents and other qualitative data were analyzed by ethnographic content analysis, and a motivation scale was applied to students. Results indicated that effective teachers seem to emphasize effort more than ability, using attributional feedback to favor student motivation. Effective teaching was also related to the sharing of classroom management responsibilities with students, and with creating a classroom culture in which students were held accountable, had self-determination, and believed that through effort they could succeed. Planning and decision making for these teachers showed awareness of the importance of creating a classroom context in which students were highly motivated, and they were aware when students were not motivated. Student's perceptions of the teachers actions were more important for influencing motivation than the teacher's real actions themselves. Contains 20 references. (JPB)
THE INTERACTION BETWEEN TEACHING PRACTICES AND THE CHANGE IN MOTIVATION OF ELEMENTARY-SCHOOL CHILDREN

Thierry P. Karsenti
University of Quebec in Hull

&

Gilles Thibert
University of Quebec in Montreal
INTRODUCTION

Motivation, a force that energizes and directs behavior toward a goal (Eggen & Kauchak, 1994), could certainly be perceived as one of the most important psychological concepts in education. In fact, according to Meece (1993), current educational problems go beyond declining achievement scores: most schools today face a crisis in student motivation. Student motivation is critical for learning, and several researchers have found a positive and robust correlation between motivation and achievement to prove it (Urugoglu & Walberg, 1979; Vallerand & Senecal, 1993). Various studies have attempted to highlight the elements that impact on school motivation. Pintrich and Schunk, among others (McCombs & Pope, 1994; Boggiano & Pittman, 1992; Waxman & Walberg, 1991; Stipeck, 1988; Bowen & Madsen, 1978), argue that teaching practices may have a tremendous impact on student motivation, and that they can affect it in many ways.

Though the influence of teachers on student motivation seems obvious, only recently have researchers identified different means through which teachers can affect student motivation. Nevertheless, most of these studies focus on the effect of a single and particular aspect of teaching practices on student motivation. For example, Ames (1981), focused on the impact of instructional grouping on students' perceptions of their ability and feelings of satisfaction, while Schunk (1989) focused on the impact of attributional feedback on student attributions and achievement motivation. Though these studies are quite helpful in pointing out how one specific teaching strategy could favor student motivation, in general they do not describe how various teaching strategies are combined to motivate students. It therefore seemed most relevant to conduct a study taking an in-depth, global look at the entirety of the teaching practices of several school teachers who are known to be great motivators. It was felt that the results would then portray not only one isolated teaching practice, but the schema, system and context of the teaching practices nourishing student motivation.

OBJECTIVE

In essence, the purpose of this study is to investigate the interaction between teaching or instructional practices and the change in elementary-school student motivation. The originality of the present study lies in that it focuses on student motivation change and how teaching practices influence that change.
THEORETICAL FRAMEWORK

Deci and Ryan (1985, 1991) introduced a theory of motivation that distinguishes various types of extrinsic motivation (EM). This theoretical approach has generated a considerable amount of research and appears quite pertinent for the field of education. An increasing number of studies have been undertaken to evaluate Deci and Ryan's EM formulation. The results consistently support the basic premises of their theory. For instance, results from confirmatory factor analyses on the motivation scales have supported the presence of three types of EM in education (Ryan & Connell, 1989; Vallerand & Thill, 1993).

In the present study, Deci and Ryan's construct has permitted us to assess student motivation in a multidimensional fashion. Their theory goes beyond the usual intrinsic/extrinsic distinction and allows for a more accurate analysis of motivation in elementary school, thereby opening the door to innovative research.

Pedagogical practices have also been studied from various perspectives. In the present research, it was decided to use a model that would facilitate the study and the analysis of the teaching practices that favor motivation. This model reflects a synthesis of various theories in the literature. It describes teaching in three phases: anticipative teaching, actual teaching, and reflective teaching. Anticipative teaching refers to all the elements of planning, organization and preparation for a lesson. Actual teaching includes all the teaching behaviours that one could observe during a lesson. Finally, reflective teaching refers to the thought and metacognitive processes following actual teaching. All three phases are interrelated, can take place simultaneously and each can influence the others.

METHOD

Because of the underlying objective of the study (to take an in-depth look at effective practices of teachers who are known to be great motivators), it seemed more appropriate to conduct a qualitative-type of field research. In particular, the method consisted of a multiple-case study (Yin, 1994) in which six elementary-school teachers and their students were selected to participate. As described below, three of these teachers were chosen for their reputation as great motivators while the other three teachers were randomly selected in schools from the same sociocultural context as the first three chosen.
As Stenhouse (1978) highlights, a case is selected because it is an example of some phenomenon of interest. To select the « motivating teachers », letters were sent to school boards requesting « great teachers » who favor student motivation for a classroom-centered research project. Out of the responses received, 18 teachers were retained. They were told that the project consisted only of two days of observation. Thereafter, the three best teachers were selected in light of how their teaching practices particularly seemed to favor student motivation. These were then asked to participate in a more in depth-study, beginning in the fall semester of the following school year. The three teachers were working in three different elementary schools of the Montreal area. They were observed for two months, starting with the first five days of school and continuing with one day per week until mid-November. The observations were recorded on audio cassettes while extensive notes were taken by an observer to supplement the audiotaped data. The teachers were also formally interviewed twice, and informal discussions were held with them whenever it was convenient to do so (at recess, at lunch or after class). The audiotaped data, the conversations with the teachers, the observation notes and the free access to teaching materials provided rich contextual information for the analysis of the lessons observed.

Documents and other qualitative data were analyzed through a process called ethnographic content analysis (Altheide, 1987). This type of content analysis uses many of the traditional content analysis procedures, but also the back-and-constant comparison that grounded theory applies (Tesch, 1989). We also used a motivation scale, based on Deci and Ryan’s motivation theory, to ensure that we observed classes where a positive change in motivation did take place. The internal consistency of the subscales was assessed with the use of the Cronbach alpha. Results from this study reveal that the internal consistency of all subscales is excellent, ranging from .80 to .92 (Table 1).

Table 1: Internal Consistency of the Five Subscales of the Test Used to Assess Motivation in this Study

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amotivation</td>
<td>.91</td>
</tr>
<tr>
<td>Extrinsic Motivation: External Regulation</td>
<td>.88</td>
</tr>
<tr>
<td>Extrinsic Motivation: Introjected Regulation</td>
<td>.80</td>
</tr>
<tr>
<td>Extrinsic Motivation: Identified Regulation</td>
<td>.90</td>
</tr>
<tr>
<td>Intrinsic Motivation</td>
<td>.92</td>
</tr>
</tbody>
</table>
Student motivation was measured at least three times in all the grade 6 classes chosen for the study, that is on the first day of school, and then in the sixth and tenth weeks. Also, the motivation of the students in the chosen, motivating classes was compared to that of other students in the three randomly selected classes. It should be noted that the five students per class who showed the most substantial change in motivation were interviewed, in order to help determine the underlying reasons for this change.

RESULTS

Results show that the motivational profiles of the elementary-school children in the six classes (the three observed, and the other three from the same context) were the same at the beginning of the school year (Figure 1).

![Figure 1](image_url)

Initial Level of Motivation (pre-test) for the six classes.
However, after 10 weeks, as shown in Table 2 and Figure 2, the results underline that the types of motivation reflecting a high self-determination and perception of competence (according to Deci & Ryan, 1991, identified regulation and intrinsic motivation) significantly increased for the students of the classes observed ($p < 0.01$ to $p < 0.001$), whereas they substantially and significantly decreased in the three randomly selected groups ($p < 0.001$). Also, the types of motivation reflecting a low self-determination and perception of competence significantly decreased ($p < 0.001$) in the three classes observed, whereas they increased in the three classes that were randomly selected ($p < 0.001$).

Table 2: Motivation Change for the Six Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Amotivation</th>
<th>External Regulation</th>
<th>Introjected Regulation</th>
<th>Identified Regulation</th>
<th>Intrinsic Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>-0.74</td>
<td>-1.32</td>
<td>-0.78</td>
<td>0.04</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>$p &lt; 0.0001$</td>
<td>$p &lt; 0.0001$</td>
<td>$p &lt; 0.0001$</td>
<td>$p &lt; 0.01$</td>
<td>$p &lt; 0.0001$</td>
</tr>
<tr>
<td>Class 2</td>
<td>-0.67</td>
<td>-1.47</td>
<td>-0.84</td>
<td>0.18</td>
<td>0.44</td>
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</tr>
<tr>
<td>Class 3</td>
<td>-1.31</td>
<td>-1.85</td>
<td>-0.70</td>
<td>0.62</td>
<td>0.75</td>
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<tr>
<td>Class 4</td>
<td>0.35</td>
<td>0.23</td>
<td>0.32</td>
<td>-1.01</td>
<td>-0.72</td>
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<tr>
<td>Class 5</td>
<td>0.33</td>
<td>0.26</td>
<td>0.28</td>
<td>-1.05</td>
<td>-0.81</td>
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<tr>
<td>Class 6</td>
<td>0.26</td>
<td>0.21</td>
<td>0.23</td>
<td>-0.70</td>
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= Change is both negative and significant
DISCUSSION

The analysis of the instructional practices of the teachers who were believed to be very effective and greatly motivating highlights several interesting points. Among these, the effective teachers seemed to put more emphasis on effort than on ability, therefore using attributional feedback appropriately to favor student motivation. These three observed teachers also shared classroom management responsibilities with the students. For example, students actively participated in establishing class rules, selecting class outings and special projects, thereby allowing them to feel more self-determined and competent. Furthermore, the motivating teachers created a classroom culture in which students were held accountable, had self-determination, believed that through effort they could succeed and had high self-efficacy beliefs. In particular, before exams or tests, teachers made it clear to the students that they had the necessary knowledge and were capable of succeeding.
These teachers were also aware of and greatly concerned with the importance of creating a classroom context in which the students would be highly motivated. This was reflected in their planning and decision making. In fact, all the effective teachers observed made a conscious effort to plan lessons that would be presented to the students in the most motivating fashion. Moreover, the teachers observed were able to detect the non-motivated students and nourish their motivation by assigning them appropriate tasks or responsibilities. Finally, it is to be noted that it was not necessarily the teachers' actions, but rather how these were perceived by their students that impacted on their motivation. Further studies could attempt to portray effective teachers in order to determine if there is a trend in their use of motivating teaching strategies.
REFERENCES


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