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<td>Source</td>
<td><em>Teaching and Learning</em>, 23(1), 1-12</td>
</tr>
<tr>
<td>Published by</td>
<td>Institute of Education (Singapore)</td>
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</tbody>
</table>

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Differences in Teacher Feedback for HA and LD Students

Jessie Ee and Lourdusamy Atputhasamy

Abstract

This study explores the types of feedback that teachers convey to different ability groups as well as to boys and girls. A questionnaire comprising of 8 scenarios on the successes and failures of high-achievers (HA) and students with learning difficulties (LD) were used to elicit feedback responses from 358 primary six teachers (101 males and 256 females) from 53 schools in Singapore. In general, teacher feedback tends to be more positive for high achievers than for LD students. There were significant differences in the type of teacher feedback found for both HA and LD students as well as for gender. Further research is necessary in identifying the types of teacher feedback that will assist the motivational orientations and strategic learning of students.

Introduction

Teacher interaction with students is crucial in shaping a conducive climate for maximizing students’ achievement and motivation (Purkey, 1970) as the type of interaction conveyed can affect students’ learning outcomes and persistence in learning (Good & Brophy, 1987). The type of interaction provided can help the student to refocus their attention on relevant aspects at improving their learning or cause them to further avoid the given task because the teacher feedback given affects the way students perceive and react to learning tasks (Hoska, 1993). Purkey (1970) posited that teacher feedback regarding a student’s performance on school tasks might enhance or demoralize the student’s self-concept. If the feedback is perceived to be positive by students, their self-concept can be enhanced and they will feel encouraged to do better in future. However, if the feedback that focused on ability is conveyed when students failed, students may assumed that they have low ability and feel discouraged from trying again and are less reluctant to attempt again. Boggiano and Katz (1991) maintain that such feedback may lead to negative self-cognitions and a “helpless” response pattern that may have adverse and long-lasting effects on achievement level.
Much research has shown that teachers' feedback to different ability groups in the classroom tend to communicate their negative and positive expectations of students (Stegemiller, 1989; Marshall & Weinstein, 1984). For example, Brophy and Good (1970) found that teachers respond more favourably and provide more praises to students who perform well academically. However, for low achievers, teachers are found to provide less feedback (Alves & Gottlieb, 1986); provide largely corrective feedback which consist of more non-supportive verbal or negative non-verbal behaviour (Siperstein & Goding, 1985; She, 1997); give more praises for easy tasks (Cooper, 1979); and provide less credit for success (Copper & Lowe, 1977).

Further, research findings reveal that teacher feedback tends to convey attributions of low ability especially to the low achievers (Ames, 1975; Beckman, 1976; Prawat, Byers & Anderson, 1983; Tollefson, Melvin & Thippavajjala, 1988). Moreover, Bar-Tal (1978) maintains that teacher feedback that conveyed attributions of low ability for student failure is likely to lead to feelings of learned helplessness among students, that is, it inhibits students' motivation to try harder as students perceive themselves as not being in control of their low ability and would not persist in their learning, believing that no amount of effort will help them to improve themselves. Ames (1984) reports that this feelings of learned helplessness has even more devastating effect on the achievement behaviour of low achievers as they perceive that no amount of effort will lead them to succeed in a competitive climate which renders success to only a few.

From past studies, teacher feedback can be categorized into

1) affective (Brophy & Good, 1974; Prawat, Byers & Anderson, 1983),
2) encouragement (Schunk, 1984) and,

Teacher affective feedback is displays of reactive emotions conveyed through teacher’s feedback of their students' performance e.g. praise, anger and sympathy. They will be termed as “emotive” feedback in this study. Encouragement feedback are feedback of encouragement, normally through effort e.g. “Try harder” or “Keep it up” while cognitive feedback are feedback that allow students to assess their performance with a view to correct or improve on them with the use of right strategies or feedback that is more strategy-oriented e.g. “Maybe it has something to do with the way you work out and solve the problem” when students failed or “You must have used the right strategies” when students succeed. In this study, this feedback will be addressed as strategy-oriented feedback.

**Emotive Feedback**

Teachers' emotive feedback are affective displays of emotions e.g. anger, sympathy or praise. Often students tend to interpret these emotive feedbacks as conveying
information about teacher’s evaluation of their ability. This interpretation can affect the students’ own perception of their ability. According to Weiner, Graham, Stern and Lawson (1982), children as young as six years understand anger is attributed to controllable factors, such as, lack of effort. Also, at about the age of nine years, children understand that sympathy is aroused when another’s failure is perceived to be caused by uncontrollable causes. Students, therefore, gain information about their teacher’s beliefs regarding the cause of their performance outcomes by attending to teacher’s emotive feedback to them. As teachers tend to make judgments about the cause of their student’s failure by communicating through their emotions, such as sympathy or anger, students are likely to process these emotional displays and utilize them to select for themselves the best explanation for their failure. Lastly, this specific ascription would influence their persistence and their expectations for subsequent success.

According to Stipek (1993), a teacher’s anger expression implies that the student hasn’t tried sufficiently hard. It is an “ought” emotion feedback and often indicates a moral evaluation. This expression of anger serves to reinforce the student’s confidence in his ability. He interprets teacher’s anger as an indication that he didn’t put in much effort, which is within his control. Thus, he will persist in his learning.

However, if teacher feedback conveyed sympathy, the student may interpret the teacher’s sympathy as evidence of the teacher’s low expectation and low perception of the student’s competence as the low ability message may be transmitted through a number of indirect cues (Brophy & Good, 1974; Weinstein & Middlestadt, 1979). According to Weiner (1983), when teachers display feelings of pity for their students who are in need of help or guidance, they feel these students are in a negative state of uncontrollable condition; as such, they tend to sympathise with them. This is unlike anger which is an emotive display perceived to be under the personal control of the person. The anger displayed by teachers implies that the student hasn’t put in enough effort.

Praise according to Brophy (1981), is “teacher reactions that go beyond simple feedback about appropriateness or correctness of behaviour” (p5). For example just simply saying “Well Done!” serves as a reinforcer for students. However, some psychologists devalued praise. According to Kamii (1984), students may depend on them as a criteria for competency but Meyer (1982) claim that it may interfere with students’ learning if it is given superficially, especially when the task is relatively easy, as it may be interpreted as an indication that the teacher has a low perception of the student’s ability and this perception is even more prominent with older students and adults. Stipek (1993) and She (1997) state that praises that are specific and informative e.g. focusing on students’ effort or specific areas that need improvement is better than praises that encourage social comparison or just mere praise for its own sake. Furthermore, if praises are given for outcome that is achieved with little effort, students perceive that effort as not being valued.
Encouragement Feedback

Teacher feedback that conveys encouragement in this study is referred to as encouragement feedback. Although this feedback is found to be relatively positive as much effort is encouraged, Covington and Oemlich (1984) found that students view effort as a double-edged sword. Effort feedback may cause negative affect and less persistence if directed to hardworking students who have already put in lots of effort. As a result, Covington and Oemlich (1984) found that these students are less persistent in their subsequent learning to avoid teacher criticism. Schunk (1984) suggests that teachers’ feedback of students’ success to effort would reduce student’ perceptions of their ability because they believe that success that requires high effort indicates lower ability than success achieved without effort. Schunk (1984) further recommends that teachers should not give successful students the impression that effort is not necessary to achieve success for he states that no learning or increase in skill will result from success that is achieved without effort.

Strategy-Oriented Feedback

In this study, strategy-oriented feedback tends to encourage students to reflect on their performance with a view to improve on them with the use of more effective strategies. Clifford (1986) found that students who attribute their failure to inappropriate strategies rather than lack of effort or low ability tend to engage in more productive achievement behaviour. These students become more strategy-oriented and view failures as problem solving task. Thus, they tend to focus on more effective learning strategies and are less humiliated than students who cite lack of ability only or are less guilty than students who cite lack of effort (Clifford, 1986; Fusco, 1996). This imply that if teacher feedback is strategy-oriented and conveys good use of strategy when they succeed and wrong use of strategies or lack of strategy usage when they fail, students will feel that they are more in control of their learning and be inclined to be more strategy-oriented and persistent in their learning as the main focus would be on improving their performance using the appropriate strategies (Fusco, 1996).

Much research literature has neglected teacher feedback on strategy. Perhaps it is less promoted by teachers in the classroom or cited by students in their attribution responses in research (Clifford, 1990). However, in a study designed by Borkowski, Weyhing and Carr (1988), teachers gave feedback that makes explicit effort and strategy attributions e.g. “I need to try and use strategy”, proved to assist students to use strategies and encourages their persistence to learn. Also, research on student attribution (Vispoel & Austen, 1993) found that students who attribute their successes and failures to strategy or lack of strategy usage showed significantly higher expectations of improvements in future learning strategies and to equivalent expectations of future effort. Vispoel and Austen (1993) and Fusco (1996) suggest that strategy attributions subsume future effort, implying that students citing strategy attributions are likely to improve their learning.
Differences in Teacher Feedback for HA and LD Students

strategies, regulate their learning and try harder, whereas those who cite lack of effort may try harder but not necessarily improve their learning strategies.

Significance of Study

Generally, according to Brophy & Good, (1974), teachers are not aware of how their feedback actually influences students' behaviour in class. Moreover, very little research has looked into teacher strategy-oriented feedback. Teachers need to be made aware not only of how their feedback has an effect on their students but also, if there are differences in the types of feedback that they should convey to different ability groups and genders. The types of feedback considered should also promote persistence in student learning and strategy usage and subsequently, enhance student achievement outcomes.

From the above research findings, teachers' feedback that is strategy-oriented and which recognizes students' strategy usage and emphasizes strategy attributions are found to enhance students' persistence in learning and achievement outcomes as compared to emotive feedback which merely conveys pleasure or disappointment and no directions; or encouragement feedback which conveys more effort with no directions for improvement. It is vital that teachers provide appropriate feedback responses that will enhance students' persistence in learning and increase student achievement outcome. As such, this study hypothesizes that there are differences in teacher feedback for success and failure instances of high-achievers (HA students) and students with learning difficulties (LD students) as well as there are gender differences in teacher feedback in the classroom.

Research Questions

The research questions that are addressed in this study are:

1. Are there differences in the types of feedback by teachers to HA and LD students in their feedback of these students' success outcomes?
2. Are there differences in the types of feedback by teachers to HA and LD students in their feedback of these students' failure outcomes?
3. Are there gender differences in the types of feedback by teachers to HA and LD students in their feedback of these students' success outcomes?
4. Are there gender differences in the types of feedback by teachers to HA and LD students in their feedback of these students' failure outcomes?

Subjects

A total of 358 primary six teachers, consisting of 101 males and 256 females from 53 public schools in Singapore participated in the study. Over two-thirds of the teachers were over forty years of age, having ten years of teaching experience,
attending at least one in-service course a year and an academic qualification of
either an “O” (General School Certificate) or “A” (Higher School Certificate) and
the Certificate of Education qualifications as a professional qualification.

Instrumentation

Past studies have used lab situations (Beckman, 1976), questionnaires (Beckman,
1976; Prawat et al., 1983; Tollefson, et al., 1988), interviews and classroom observa-
tions (Brophy & Good, 1974) with the main focus on 1) affective (Beckman,
1976; Tollefson, et al., 1988) e.g. teachers’ praise, anger and sympathy and 2) cog-
nitive variables, namely, corrective and strategy feedback and attributions
(Fennema & Peterson, 1990) in understanding how teacher interactions affect
students’ persistence in learning and their achievement outcomes.

In order to sample teachers’ feedback responses on students’ successes and
failures, a pilot study was conducted with 5 primary schools in Singapore. Fifty-
five teachers from these schools had to provide their feedback responses to 6
different scenarios adapted from Prawat, Byers and Anderson (1983) that describes
the successes and failures of academically able students, and LD students, e.g.

1. John is a pupil who does well in class. However, he has not been putting forth much effort in
   preparing for the class test. This appears to be a pattern not just this year but in previous years
   judging from his teacher’s comments. On a recent test, John got a very high score. What would
   you have said to him?

2. Ken has learning difficulties. He tried his best in his recent Maths test and yet was found to
   obtain one of the lowest grades in class. What would you have said to him?

The scenarios elicit verbatim responses from the teachers by allowing them to
provide descriptions of their personal responses to two ability groups of students
for successes and failures. After the collation of the teacher feedback responses,
three common types of responses were obtained. With the assistance of another
researcher, inter-reliability agreement on the categorization of the three types
of feedback was established namely; emotive, encouraging or strategy-oriented.
These authentic responses were then inserted as forced responses for the eight
scenarios describing the successes and failures of HA and LD students in the
format of the questionnaire for the current study. For example:

1. The emotive teacher feedback based on emotion demonstrates praise and
   pleasure for success, e.g.

   [ ] Well done! I’m very pleased with the effort you’ve made.
and disappointment for failure, e.g.

[ ] What happened to you? I’m disappointed with your marks. You can do better than that.

2. The teacher encouragement feedback provides praise and encouragement for success, e.g.

[ ] Good work, Tom. Keep on working hard and you will score even better marks next time.

and sympathy and encouragement for failure, e.g.

[ ] Don’t lose heart. Try harder.

3. Whereas, the teacher strategy-oriented feedback provides encouragement and emphasizes on the use of a good strategy for success, e.g.

[ ] Good work! You must have used the right strategies to plan and figure it out all by yourself. I like the way you apply and adapt what you’ve learnt for this project, Tom. Keep it up!

and emphasizes on the lack of strategy usage and an indication on the use of strategy for failure, e.g.

[ ] Let’s work out what the problem is and look for a way to solve it, Janet.

Thus, each scenario for the questionnaire consisted of three teacher feedback for success based on (1) emotive, (2) encouragement and (3) strategy and, three teacher responses for failure based on (1) disappointment, (2) encouragement and (3) strategy.

The teachers responded to the scenarios in terms of students’ achievement outcome (e.g. success or failure outcome), ability level (e.g. students who perform well academically and LD students) and gender (e.g. male or female).

Data Analysis

In examining the types of teacher feedback conveyed to the different ability groups and gender as well as to examine if there were any differences in teacher feedback to HA and LD students; frequencies, percentages and Chi-square statistics were generated using the procedures available through SPSS.

Results

The three types of feedback responses for students’ successes and failures most preferred by teachers were tabulated as a function of students’ ability-group and gender (Table 1).
Table 1
Frequencies and percentages of types of teacher feedback for high-achievers (boys and girls) and LD students (boys and girls) for successes and failures.

<table>
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<tr>
<th>Feedback Type</th>
<th>Boys</th>
<th>Girls</th>
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<tr>
<td></td>
<td>HA</td>
<td>LD</td>
</tr>
<tr>
<td>Success</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotive</td>
<td>69 (19.8%)</td>
<td>52 (15.0%)</td>
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<tr>
<td>Encouragement</td>
<td>162 (46.4%)</td>
<td>89 (25.6%)</td>
</tr>
<tr>
<td>Strategy</td>
<td>118 (33.8%)</td>
<td>206 (59.4%)</td>
</tr>
<tr>
<td>Failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotive</td>
<td>7 (2.0%)</td>
<td>21 (6.0%)</td>
</tr>
<tr>
<td>Encouragement</td>
<td>194 (56.1%)</td>
<td>215 (61.8%)</td>
</tr>
<tr>
<td>Strategy</td>
<td>145 (41.9%)</td>
<td>112 (32.2%)</td>
</tr>
</tbody>
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There were significant differences in teachers’ preferred success feedback for HA and LD students, $X^2 = 47.52$, df = 2, p<.01 in the case of boys and, $X^2 = 18.47$, df = 2, p<.01 in the case of girls. In the case of boys, teachers tended to provide both encouragement and strategy feedback to the HA boys but mainly strategy feedback to the LD boys. In the case of girls, teachers tended to give mostly encouragement feedback to both HA and LD, but at the same time were more likely to emphasize strategy feedback to LD girls than HA girls.

For failure situations, significant differences in teacher feedback preference were also obtained for both HA and LD students, $X^2 = 12.31$, df = 2, p<.01 in the case of boys and, $X^2 = 119.05$, df = 2, p<.01 in the case of girls. In the case of boys, teachers tended to provide both encouragement and strategy feedback to the HA boys but provide mostly encouragement feedback to the LD boys. In the case of girls, teachers preferred to give encouragement feedback and strategy feedback to LD girls but mostly strategy feedback to HA girls.

Inter-correlations among the teacher feedback variables vary from negatively low to high. Strategy-oriented feedback was negatively correlated with emotive and encouragement feedback ($r = -.40$, $r = -.63$, respectively) whilst encouragement feedback variable was also negatively correlated with emotive feedback. Teachers who have greater preference in using strategy-oriented feedback were less likely to use emotive or encouragement feedback; likewise, less preference for encouragement feedback for those teachers who prefer emotive feedback.

Discussion

The results of this study indicated as expected, that teachers not only provide feedback responses differently to students with different academic ability but
there are also gender differences in the feedback responses between the groups. These findings are similar to previous findings (Brophy & Good, 1974; She, 1997), which showed that teachers behaved differently towards LD students. Specifically, teachers’ preferred providing more sympathetic encouragement feedback to LD students while more strategy-oriented for HA students when they failed. These findings demonstrate that sympathetic encouragement feedback tends to convey to LD students that it is their ability that may be the contributing factor. Teachers’ feedback towards LD students may indirectly emphasize on the most salient and definable aspects of these students’ ability. Specifically, this finding is similar to Weinstein et al.’s study (1979), which exhibited teachers’ negative feedback towards low-achieving students. As such, this might reduce LD students’ persistence in learning if they perceive ability as innate.

Although teachers provide more encouragement feedback for both ability groups for success, they tend to use this approach more with the girls than with the boys. Could this be due to the sex-stereotype view that girls need to be handled more gently than boys? Or has this any relation to culture? Furthermore, teachers tend to provide more strategy-oriented feedback to male students than female students in general and in particular to male LD students. Do teachers have higher expectations for boys than girls? When LD boys are successful in a task, could the strategy-oriented feedback be given with the hope that their performance will perpetuate over time into the more self-regulated style of a learner who is more strategic in his learning and problem-solving approach? Again, is this associated with a culture where boys’ education is perceived as more important than that of girls?

Teachers’ feedback responses for failure tend to be more positive for HA than LD students. It may indirectly be inferred that HA students’ failure may be due to ineffective strategy usage or lack of strategy usage. It may also convey that teachers have higher expectations for the future learning outcomes of HA students. Thus, there is more likelihood that HA students would persist in learning as they attempt to apply new strategies. Teachers’ sympathetic encouragement feedback to the failure of both male and female LD students are more likely to reinforce these students’ perceptions that low ability may be a contributing factor and that they are not in control of their own learning. As such, this might reduce their persistence in learning and their subsequent achievement outcome.

Educational Implications for Teachers

Some of the things that teachers may do to make feedback more effective and helpful to the students are:

Place greater emphasis on strategic effort through strategy-oriented feedback by guiding students how to study or practise, how to monitor their performance and how to choose or develop alternative strategies when necessary.
De-emphasize the salience of ability differences and ability attributions for failure in their feedback responses. While ability differences will always exist amongst students in a class, teachers will be more successful in enhancing student motivation and persistence if they abandon their belief that ability is stable and uncontrollable and in their feedback promote the view that ability is a set of skills that can be improved over time. This can be done if teachers recognize skill areas in which students can make progress and suggest alternative learning strategies in content and skill areas where improvement is needed.

Encourage co-operative learning groups where students work together to achieve group rather than individual goals and each member contributes to the success of the group. Co-operative learning groups also provide opportunities for students to learn more effective strategies from one another.

Identify specific emotional responses (anger, upset, guilt) and provide constructive responses to failure and help students in translating these emotions into future achievement behaviours that encourage productive learning and persistence.

Provide corrective feedback with relevant, explicit explanations about the value of the task and emphasize students’ ascription of causality for internal factors that enhance persistence in learning, namely, strategy and effort e.g. “That’s good. You’re really learning how to add.” or “That’s good. You’re learning to check your work thoroughly before you hand them up for marking.”

Provide positive feedback, which is precise in assisting students to refocus on their mistakes, or errors so that it will spur them on in improving their learning. Whenever, students are unable to get the right answers, teacher should convey that there may be a need to change the strategy used so as to help students perceive that their failure is due to wrong usage of strategy or lack of strategy usage. This will drive them to improve and not feel demoralized. Positive feedback should not be over dramatic, carelessly or freely given for it will lose its value, may convey negatively to students that they possess low ability and suggest that the teacher is merely providing encouragement. For example, “That’s the best I’ve seen!” or empty praises e.g. “That’s good.” It is necessary to define what is “good” to students.

Deliver feedback contingently, that is, immediately, accurately and promptly. All students should be given equal opportunities to receive feedback. Teachers should also always be conscious of and sensitive to the possibility that their feedback may convey differential treatment.

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