Teacher Feedback: Its Correlation with Students’ Preferences and Perceptions, and Its Impact on Learning at an International school in Thailand.

Rojean Marcia¹, Henry Foster², Jimmy Kijai³
¹,²Asia-Pacific International University
³Andrews University
rojean@aims.ac.th

ABSTRACT

Being up-to-date with researched-based teaching practice is essential in providing quality education. To achieve this goal, this quantitative study investigated the effect of teacher feedback (TF) on student learning in an international high school. It was hypothesized that teacher feedback affects achievement. A paper-and-pen survey questionnaire adapted from Rowe and Wood (2008) was administered to students in grades 9-12. Data was collected through convenient sampling (N= 78). Descriptive statistics analysis revealed TF methods were either individual verbal, individual written, group verbal or group written. Students valued TF that specifically revealed what needed to be improved, and what the teachers’ expectations were relevant to the purpose of the assignment. They preferred TF on the errors they made on their right and wrong answers and through sample answers posted on Schoology. This was indicative of TF on surface learning. The preferred TF on deep learning included discussing the subject with the teacher, guidance on how to work out the answers on their own and participation in classroom discussion. A multiple regression was calculated to predict CGPA based on teacher feedback. The result shows that there is a weak relationship between TF and student achievement (R² of .096). For those who are interested in teacher feedback, the researcher recommends an experimental study on the feedback that leads to self-regulation.

Keywords: Teacher Feedback, preferences, perceptions, student learning, high school.

INTRODUCTION

Every teacher desires for their students to succeed, however, some students still fail their course. It is believed that teacher feedback if used effectively aids achievement. As this study revealed feedback and deep learning are strongly related.

Background and Context

Teacher feedback plays a very significant role in learning. In fact, it is how the students perceive feedback that affects how they receive or make use of it. There are, however, only a few studies regarding students’ perceptions (Rowe and Wood, 2008) especially its relation to...
achievement (Strijbos, Narcis, Dunnebier, 2010). The participants in this study were students from Adventist International Mission School (AIMS), a Seventh-day Adventist private school in Thailand.

Rationale
Students’ preferences and perceptions of teacher feedback deserves scholarly attention. This present study described the students’ perceptions and preferences of teacher feedback and how these factors relate to student learning.

Statement of the Problem
Although, there have been studies on teacher feedback and its impact on student learning, there are but a few that looked at the importance of the students’ preferences and perceptions of teacher feedback especially among high school students. This study was conducted among the grades 9-12 students at AIMS with an enrollment of 425 in 2017.

Purpose of the Study
The purpose of the study is to determine how teacher feedback affects the achievement. The findings of this study can be used a guide for teachers wanting to improve in their in teaching practice.

Research Questions
1. What are the reported methods of teacher feedback?
2. What are the reported importance and how the students value teacher feedback?
3. What are the student preferences of teacher feedback?
4. To what extent does the importance placed by the students on teacher feedback and student preferences of teacher feedback relate to CGPA? And to what extent did students value teacher feedback, and what effect did this have on CGPA?

Hypothesis
It was hypothesized that teacher feedback has a significant effect on achievement.

Significance of the Study
The findings of this study provide research-based evidence that can direct instructional strategies. Teachers will hopefully realize that listening to students talk about what’s going on in their learning will enable them to cater better to the needs of their students. There is no record to date on student perceptions and preferences of teacher feedback and its impact on learning conducted at an international school in Thailand.

Limitation
The researcher found it difficult to find a study on preferences and perceptions of teacher feedback in Asia. Since this study was done among grades 9-12 students at a private international secondary school, the findings may not be applicable to other private or government schools in Thailand nor to any other schools in world. The questionnaire used in this study only measured student’s preferences and perceptions of teacher feedback and was tested to identify the best predictor for student learning. This study used a purposive sampling design in order to have sufficient data as the population of the school is small.

**Organization of the Study**

The following chapters are organized as follows: literature review discusses the existing literature on teacher feedback and provides the conceptual framework. Methodology is a detailed account of the research methodology, which includes the population, data collection and analysis methods. Results and discussion contains the data analysis, and the outcome of the study. Finally, Conclusion discusses the findings and concludes with recommendations.

**LITERATURE REVIEW**

This chapter presents related literature about feedback, its relationship to learning, definition, methods, value, and impact. It is directed towards the exploration of the student perceptions and preferences on teacher feedback and its impact on learning.

**Feedback and Learning**

Teacher feedback and student learning are interwoven. Feedback is widely considered as central to learning (Mulliner & Tucker, 2017; Carless, 2006). It is a fundamental aspect in the teaching and learning process (Seker, & Dincer, 2014; Murtagh, 2014; Chokwe, 2015).

**Definition of Feedback**

Teacher feedback is any information regarding schoolwork given either verbally or in written form. In fact, Mulliner and Tucker, (2017) and Ouahidi and Lamkhanter, (2017) conceptualized feedback as the knowledge of results of the correction of errors. In this study, however, feedback is information that help students bridge their learning gap (Sardareh, 2016; Hattie, 2012; Weaver, 2006; Havnes, et al., 2012; Mulliner & Tucker, 2017; Fisher, Frey, Hattie; 2017). It tells students where they are in their learning and what steps they need to take to move forward (Wiliam & Leahy, 2015; Hattie, 2012).

**Methods of Feedback**

Feedback can come in many forms. The most common mode is correcting student answers or errors (Singh, Lebar, Kepol, Rahman & Mukhtar; 2017). Oral/Verbal Feedback is the spoken
feedback given to individual students or the class. It plays an important role in classroom teaching (Li, Cao & Mok; 2016) and although, audio feedback is particularly easy to assimilate (Knauf, 2016), it is crucial to know when to use it. Written Feedback is valuable because the students can reread it or refer to it in the future. There may be situations where teachers are unwilling or unable to give feedback on a given work. Rowe and Wood, (2008) caution that all students reported that the worst feedback was receiving no feedback at all. In fact, a majority of students and staff agreed that a grade without feedback is insufficient even if returned quickly (Mulliner & Tucker, 2017).

**Effective Feedback**

Effective Feedback answers the following three questions:

1. Where is the student going? Feedback that answers this question describes the goal clearly and shows how the student would know when he or she reaches the goal. This feedback also includes advice on how to improve so the student can meet the goal (Hattie, 2012; Ellis & Loughland, 2017).

2. How is the student going? Feedback that answers this question describes where the student is on the learning continuum. (Hattie, 2012; Ellis & Loughland, 2017). This feedback describes the student’s work and makes suggestions for improvement (Brookhart, 2008).

3. Where to next? Feedback that answers this question describes the steps towards the goal. (Hattie, 2012; Ellis & Loughland, 2017).

**Perceptions of Feedback**

Students view helpful feedback when it builds self-confidence and self-evaluation (Struyven, Dochy & Janssens, 2005); assists them in preparation for the final exam, and for applying skills from one area of study to another (Rowe & Wood, 2008).

Although, there are many factors that ensure the positive response of students on teacher feedback here are some of those determining factors to ensure that feedback will be acted upon. Firstly, it has to be understandable and secondly, the students must be able to use it. Even though, students have every intent to improve their work but if they are not understanding the feedback given to them, they will be forced not to act on that feedback.

1. Feedback received is relevant to purpose of assignment

Feedback has to be related to the task and processes that the students do or will do for it to be meaningful. In a study of Rowe and Wood (2008), they found that where students perceived
the feedback to be irrelevant to future assessments, they did not consider the feedback as important.

2. Feedback received is relevant to my goals as a student
Feedback has to be designed in a way that clearly and specifically points out what needs to be improved and include suggestions on how to fix the problem. To be effective, developmental feedback therefore, needs to encompass more than an appropriate explanation or justification of the assessment given. It needs to be perceived as timely and relevant to the student’s future studies, focused on valued and attainable objectives (Rowe & Wood, 2008).

3. Feedback to assignments provided within 2 weeks
Feedback has to be given during a period while the activity is still fresh in the minds of the students and when there is still opportunity to use it. Wiliam and Leahy, (2015) stated that, “the shorter the time interval between eliciting the evidence and using it to improve instruction, the bigger the likely impact on learning.”

Although, one of the main responsibilities of a teacher is to provide timely feedback, however, this might not always be possible due to teachers’ workload and time constraints so some students came up with a realistic timing for teacher feedback. In a study by Mulliner and Tucker, (2017) the students as a general rule were prepared to wait for feedback within 10 working days. While the students were willing to wait to a maximum of 15 working days in the case of group work and mid-module assignments, however, for essays and reports, they needed feedback prior to the next assignment. For multiple choice and short answer questions, the students wanted the feedback in 5 working days (Rowe & Wood, 2008). Ultimately, late feedback becomes useless to students (Mulliner & Tucker, 2017) and waiting too long demotivated them (Seker & Dincer, 2014).

4. Specific feedback is better because it helps me to understand what I did right and wrong in an assignment
Helpful feedback is specific. Brookhart (2008) agrees by saying that effective feedback is “specific enough so the student knows what to do next, but it leaves the student with some thinking to do.” “It provides details on how to improve rather than just indicating whether a student’s work is correct or not” (Murtagh, 2014 p. 518).

5. Participating in classroom discussion is the most effective way to learn.
Interaction in the classroom as a result of working together has the potential to create an environment of deep learning. Blair and McGinty, (2013) said, feedback-dialogues as a collaborative discussion about feedback (between teacher and student or student to student)
enables shared understandings and subsequently provides opportunities for further development based on the exchange. MacLellan, (2001) added that “assessment can only have a formative influence if learners are involved in the process.” Feedback should be a collaborative process.

Murtagh, (2014 p. 536 ) agreed by saying that “fostering dialogue at the classroom level, enabling the pupils’ voice to be heard and valued has the potential not only to improve relationships but to enhance learning and achievement which policy makers seek.” Finally, complex tasks that involve collaboration results to deep learning (Fisher, Frey & Hattie; 2017).

**Conceptual Framework**

Based on the discussion above, it is obvious that teacher feedback is a comprehensive concept. This conceptual framework is a synthesis of the variables of teacher feedback that makes this study unique. The researcher adapted the constructs from Rowe and Wood, (2008) which are discussed in full below.

**Composition of Teacher Feedback**

Teacher Feedback in this study is grouped into perceptions of feedback and preferences of feedback. Perceptions was referred to as value of feedback that was divided into two subgroups: feedback for motivation to learn and feedback for self-regulation. Whereas, preferences of feedback was divided into surface learning and deep learning.

The conceptual framework below shows the relationship between the perceptions of feedback and the preferences for feedback to student learning. It is believed that effective feedback promotes learning.

**Teacher Feedback**

![Conceptual Framework Diagram]

**Conclusion**

This chapter covered a brief introduction of feedback and learning, the definition of feedback, methods of feedback, effective feedback, perceptions of feedback which is subdivided into feedback for motivation to learn and feedback for self-regulation, preferences of feedback which is divided into surface and deep learning and impact on student learning.

In addition, a conceptual framework is presented based on the study of Rowe and Wood, (2008). The next chapter will discuss the methods used for data collection and analysis.
METHODS

Research Design

This study is quantitative in nature. A correlational design was used to determine the reported methods of teacher feedback, perceived value of teacher feedback, the student preferences for teacher feedback, the extent of student preferences of teacher feedback on CGPA and the extent the student value teacher feedback and its effect on CGPA. Purposive sampling was used in this study.

Population and Sample

The population for this research were grade 9-12 high school students, where the majority of students have stayed at AIMS for approximately 10 years. This school is specifically chosen since approximately 90% of the students at AIMS stay from pre-school to high school which gives credibility to their responses about teacher feedback.

Instrumentation

The original questionnaire consisted of five parts: a) demographic data: 8 items b) Feedback provided by the teachers: 17 items, c) Perceptions of feedback: 15 items, d) Value of feedback: 5 items and e) Preferences for feedback: 26 items.

3.5.1 Ethical Considerations

The survey in this study was an adaptation of the questionnaire used by Anna Rowe and Leigh Wood (2008) entitled “Student Perceptions and Preferences for Feedback” a study done in Australia. AIMS administration granted permission to use this questionnaire. All students were asked to participate in the study voluntarily. The instructions were read to the students and clarifications were given to those who had questions. The instructions included the confidentiality of the names of those who voluntarily took part in the study. The students took between 10-15 minutes to complete the survey.

Procedure

Descriptive Analysis was used to determine the validity and reliability of the independent variable value of feedback. The Cronbach’s alpha for Feedback for motivation to learn was .84 with skewness of -0.48 and feedback for self-regulation was .72 with skewness of -0.20 both indicate good internal consistency.

Descriptive Analysis was used to determine the validity and reliability of the independent variables for feedback preferences. The Cronbach’s alphas for deep learning was .76 with the skewness of -.47 and for the surface learning is .71 with the skewness of -.08.

Summary

1616
The methods used in this quantitative research were presented in this chapter. The purpose of this study was to find out the students' perceptions and preferences of teacher feedback and its impact on learning at AIMS using a questionnaire to collect primary data.

**RESULTS**

**Introduction**

In this chapter, the results of the data analysis presented in chapter three are discussed. It is believed by many researchers that teacher feedback affects learning. It is the desire of the researcher to find a key to optimize student learning where one works, thus, this study was developed to investigate student perceptions and preferences of teacher feedback and its impact on learning at AIMS.

**Description of the Sample**

The population for this research were 78 grade 9-12 high school students of AIMS. This school is specifically chosen since approximately 90% of the students at AIMS stay from preschool to high school (about 16 years) which gives credibility to their responses about teacher feedback. Among respondents, 32% were in grade 9, 30% in grade 10, 20% in grade 11 and 18% in grade 12.

**Results by Research Question**

**Question 1. What were the reported methods of teacher feedback in this study?**

To answer this question, descriptive statistics was used.

The results of this study show 62% of the students reported receiving no teacher feedback 50-75% at a time. Sixty percent reported receiving grades 50-75% at a time. However, 23% of the students claimed to have received grades less than 25% at a time. Fifty-nine percent of the students reported receiving individual written comments 25-50% at a time.

Several factors may have affected these results including differing perceptions and preferences of students on the types of feedback, the quantity or quality of the comments, and time it took for essays or projects to be marked and returned to them. It appears that teachers may not have the time to comment on some classwork.

Sixty percent of the students indicated that they received group verbal feedback 50-75% at a time. Fifty-six percent of the students stated that teachers gave group written comments 25-50% at a time. Fifty-seven percent of the students claimed to have received individual verbal feedback from their teachers 25-50% at a time.
There are several factors that could influence this data. Firstly, group feedback is one way of providing feedback that does not require a lot of time for teachers outside of class time and it is convenient. The downside to it though is that since it is not written down, it could be misunderstood or forgotten easily. This could be the reason for not giving frequent individual feedback. Secondly, it appears that AIMS teachers use group work often. The researcher believes that if a teacher uses a rubric for group work, the marked rubric can serve as the feedback and it would not require a different set of group written comments.

**Question 2. What was the perceived value of teacher feedback for the students in this study?**

To answer this question, descriptive statistics was used to determine the means, standard deviations and percentages of agree and disagree responses to the reported values of feedback for motivation to learn and feedback for self-regulation (see Table 4.1).

Eighty-six percent of the students reported that feedback tells them what they need to do to improve their performance in a subject and feedback tells them what the expectations of the teachers are. While 32% reported “when I don’t receive any feedback I feel that the teacher does not respect me.”

The data shows that students value feedback that specifically points out what needs to done to improve performance. It appears that students are focused on improving their performance. Although, this feedback is important, the researcher believes that it is appropriate only for students who are trying new things. The researcher believes that students who are able to monitor their own learning will not depend solely on teacher feedback. As Hattie (2012) puts it, “novices mostly need task feedback; those who are somewhat proficient mostly need process feedback, and competent students mostly need regulation or conceptual feedback.”

Another type of feedback that the students value is that which shows the teachers’ expectations. It seems that students are concerned about reaching the goals set by the teacher. In general, the students expect to receive feedback from their teachers but a third of the respondents reported that absence of feedback does not mean that teachers disrespect them. They know that teachers have a large workload.

The following feedback for motivation to learn was perceived as important by the respondents: “feedback tells me what I need to do to improve my performance in a subject” (M=3.35, SD=.79), “feedback tells me what the expectations of the teachers are” (M=3.27, SD=.80), “when teacher gives feedback it shows that they care about the work I have done” (M=3.24, SD=.86), “I deserve feedback when I put so much effort into assignments or
projects” (M=3.23, SD=.72), “I use feedback to try to improve my results in future assignments” (M=3.18, SD=.82) and “teachers who provide feedback care about what students think” (M=3.03, SD=.92).

Seventy-four percent of the students reported that the feedback they received is relevant to the purpose of the assignment (M=2.84, SD=.67) (see Table 4.1). Seventy percent reported that the teaching staff were always willing to provide feedback (M=2.83, SD=.76); however, only 25% of the students reported that the teaching staff is active in providing feedback (M=1.97, SD=.93).

The data shows that students value feedback that is relevant to the purpose of the assignment. This could be due to the focus of the students, which appears to be how to improve performance. Although, the researcher believes that feedback can extend to assisting students to set goals for their learning, build strategies how to reach these goals, and to execute these strategies. The data also shows that teaching staff were always willing to provide feedback but only a quarter of the students reported that staff were active in providing it. The possible reasons could be that teachers are willing to give feedback but they may not necessarily have the time and energy to provide feedback. Further, teachers may have always provided feedback but only to students who came and asked for it.

Table 1. Feedback for self-regulation

| Statement                                           | N  | M  | SD  | % a  
|-----------------------------------------------------|----|----|-----|------
| q2.3 Feedback received is relevant to purpose of assignment | 76 | 2.84 | .67 | 73.7 |
| q2.6 Teaching staff always willing to provide feedback | 76 | 2.83 | .76 | 69.7 |
| q2.7 Feedback received can be applied to my studies/work | 77 | 2.75 | .76 | 66.2 |
| q2.2 Feedback received is relevant to my goals as a student | 78 | 2.65 | .68 | 64.1 |
| q2.4 Teachers provide enough information to make feedback useful | 76 | 2.62 | .77 | 55.2 |
| q2.8 Feedback is presented in a way everyone can participate | 76 | 2.61 | .69 | 53.9 |
| q2.5 Feedback to assignments provided within two weeks | 76 | 2.49 | .87 | 57.9 |
| q2.9 Teaching staff is active in providing feedback | 76 | 1.97 | .93 | 25.0 |

a1-Strongly disagree, 2-disagree, 3-agree, 4-Strongly agree
%b Strongly agree and agree combined percentages

Overall, it appears that feedback for motivation to learn is proved to be higher or more predictive factor with the average mean = 3.01 (see Table 3) compared to feedback for self-regulation with the average mean = 2.56 (see Table 1).

**Question 3. What were the student preferences for teacher feedback?**
To answer this question, descriptive statistics was used. Frequencies of the surface learning were reported while the deep learning category was reported in Table 2.

**Surface Learning**

Ninety-one percent preferred it when teacher feedback focuses on the errors they made (M=3.35, SD=.65), while eighty-eight percent preferred specific feedback on the right and wrong answers on the assignment (M=3.36, SD=.72) and eighty-seven percent preferred when teachers post sample answers on Schoology (M=3.37, SD=.77). Ninety-one percent of students reported their preference for corrective feedback by selecting either agree or strongly agree. This could mean that students think that learning means getting the right answers or this could be the only available feedback they receive instead of feedback about their task, process and self-regulation as proposed by Hattie (2012).

The three least preferred methods of teacher feedback follows: Twenty-two percent reported feedback is only useful when it is positive (M=2.13, SD=.84), while 32% said teachers’ written comments are often difficult to read and poorly explained (M=2.25, SD=.75) and thirty-two percent said, “I prefer it when teachers just give us the answers (M=2.19, SD=.86) and I don’t like it when teaching staff encourage questions in lectures because it wastes time (M=2.29, SD=.82).

Surprisingly, students recognized that not only positive feedback is useful to their learning. It appears that positive feedback, although it could give encouragement, may not have facilitated and guided the students towards their learning goals. In this study, the researcher proposed that any feedback that results in students’ action impacts learning including what could be termed as negative feedback.

Students did not find teachers’ written comments helpful because they were often difficult to read and poorly explained. It seems that AIMS teachers tried to provide feedback as much as possible, however, perhaps due to the number of assignments they had to provide feedback for, their explanations were not clear. When feedback is not clear and not well explained, students miss the real purpose of feedback, which is to facilitate student learning.

Students did not like it when teachers just gave them the answers. This preference seems to indicate that students need feedback about the process of their learning and how they can regulate their learning as Hattie (2012) has stated. This answer also appears to indicate that students would like feedback that requires critical thinking.

Finally, students did not like it when teachers encouraged questions in lectures because they felt it wasted time. This may be because the questions can be easily found in the textbook, or
the time is just spent on the teacher asking a question and the students provide the answers on a previous assignment. The researcher believes that critical thinking questions although take time to answer is beneficial for students. However, if the students are made to expect the teacher has to cover the textbook/s, then it could feel like asking questions can be a waste of time.

Overall, the following feedback for surface learning was perceived as important: I learn more when my teacher focuses on the questions I got wrong (M=3.35, SD=.65), specific feedback is better because it helps me to understand what I did right and wrong in an assignment (M=3.36, SD=.72), I like it when teachers post sample answers on Schoology (M=3.37, SD=77) and I feel encouraged when teachers provide general feedback in class (M=3.04, SD=.81).

Deep Learning

Ninety-one percent of the students either strongly agree or agree to the importance of discussing the subject with the teacher (M=3.37, SD=.68), which could be an indication that students value communication (see Table 4.2). The researcher believes that when students are able to ask questions, which they may not have had the chance to ask in class and get immediate feedback, their learning becomes meaningful.

Secondly, 83% of the students preferred individual feedback because they can clarify issues with the teacher (M=3.19, SD=.80). Individual feedback is customized feedback so it caters to the specific needs of the students.

The two least preferred types of feedback way were feedback that guide us to work out the answers ourselves (M=2.71, SD=.88) according to 64% and participating in classroom discussion (M=3.05, SD=.87) according to 73%.

Sixty-four percent of students either strongly agreed and agreed that they do not prefer feedback that guides them to work out answers for themselves. It appears that students liked to be handed the answers. The researcher believes that this could be due to the practice at AIMS where teachers initiate the completion of missed work instead of students making an effort to satisfy missing requirements. As a result, students become passive with their learning. Over time, these high school students who have attended AIMS most of their school life have developed the habit of not wanting to discover answers for themselves.

Another type of feedback, which is least preferred with 73% agreement is participating in classroom discussion. It appears that students do not receive feedback that supports learning when they participate in classroom discussion. This could mean that the discussions are not
engaging, relevant or challenging. Additionally, students may have a different perspective about meaningful classroom discussion.

Table 2. Item Statistics for Deep Learning

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>An important part of learning is being able to discuss the subject with my teacher</td>
<td>3.37</td>
<td>.68</td>
<td>91.1</td>
</tr>
<tr>
<td>Individual feedback is better because I can clarify any issues with the teacher</td>
<td>3.19</td>
<td>.80</td>
<td>83.4</td>
</tr>
<tr>
<td>I learn better when the teacher encourages me to think deeply about the subject matter</td>
<td>3.19</td>
<td>.86</td>
<td>80.8</td>
</tr>
<tr>
<td>General feedback provided in class helps me learn independently</td>
<td>2.95</td>
<td>.70</td>
<td>78.2</td>
</tr>
<tr>
<td>Participating in classroom discussion is the most effective way to learn</td>
<td>3.05</td>
<td>.87</td>
<td>73.1</td>
</tr>
<tr>
<td>I like it when teachers guide us to work out the answers ourselves</td>
<td>2.71</td>
<td>.88</td>
<td>64.1</td>
</tr>
</tbody>
</table>

% Strongly agree and agree combined percentages

Many students perceived the following feedback for deep learning as important: An important part of learning is being able to discuss the subject with my teacher (M=3.37, SD=.68), Individual feedback is better because I can clarify any issues with the teacher (M=3.19, SD=.80), and I learn better when the teacher encourages me to think deeply about the subject matter (M=3.19, SD=.86).

Question 4. To what extent did student preferences of teacher feedback have on CGPA? And to what extent did students value teacher feedback, and what effect did this have on CGPA?

To answer this question, descriptive statistics was used to determine the correlation between the four categories of teacher feedback with the CGPA (see Table 4.3) and multiple regression was calculated to determine which best predicts CGPA.

Table 3 shows that there is a strong positive relationship between CGPA and feedback that promotes deep learning r = .72, p = <.001. There is a moderate positive relationship between CGPA and feedback that promotes surface learning r = .46, p = <.001 and a weak positive relationship between CGPA and feedback for regulation r = .34, p = <.001.

Table 3. Inter-correlation between CGPA and teacher feedback categories (n=78)

<table>
<thead>
<tr>
<th>Variables</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CGPA</td>
<td>.14</td>
<td>.24*</td>
<td>.15</td>
<td>.23*</td>
</tr>
<tr>
<td>2 Feedback for motivation to learn</td>
<td>.34***</td>
<td>.72***</td>
<td>.39***</td>
<td></td>
</tr>
</tbody>
</table>
Bivariate correlation between teacher feedback categories and cumulative grade point average found in. The data shows that the best predictor for student learning is feedback for self-regulation (beta = .208) followed by surface learning (beta = .197). However, as a set, this model does not support the implied hypothesis that teacher feedback impacts student learning (R2 = .096). A possible reason for this finding is that, the questionnaire used was adapted from a study, which targeted university students in Australia.

A multiple regression was calculated to predict CGPA based on teacher feedback. A weak regression equation was found (F(4,73)=1.93, p=.115), with an R2 of .096. Participants’ predicted CGPA is equal to - .262 + .591 (teacher feedback) grades when teacher feedback is designed for surface learning. Participants’ CGPA increased .591 for each surface learning teacher feedback.

Summary of Major Findings

The reported methods of teacher feedback in this study include verbal (60%) and written feedback (56%) and individual feedback (57%). The perceived value of teacher feedback for students in this study were grouped into values of feedback for motivation to learn which includes “feedback tells me what I need to do to improve my performance in a subject” and “feedback tells me what the expectations of the teachers are” (86%) and feedback for self-regulation which includes “feedback received is relevant to [the] purpose of the assignment (78%) (see Table 4.1). Among the student preferences for teacher feedback which were grouped into surface and deep learning were “I learn more when my teacher focuses on the questions I got wrong (91%) and “An important part of learning is being able to discuss the subject with my teacher (91%) respectively. Table 4.3 shows that there is a strong positive relationship between CGPA and feedback that promotes deep learning r=.72, p=<.001. However, a weak regression equation was found (F(4,73)=1.93, p=.115) with R2 = .096.

In the next chapter, the researcher discusses the implications of this study and suggest items for further investigation so teacher feedback can be fully valued and can truly benefit learning.

**DISCUSSION**
In many ways, is the most important section in an article (Feldman, 2004:4). Because it is the last thing a reader sees, it can have a major impact on the reader’s perceptions of the article and of the research conducted (Summers 2001:411).

Different authors take different approaches when writing the discussion section. According to Feldman (2004:5), Perry et al. 2003: 658), and Summers 2001: 411412), the discussion section should:

1. Restate the study’s main purpose
2. Reaffirm the importance of the study by restating its main contributions
3. Summarize the results in relation to each stated research objective or hypothesis without introducing new material
4. Relate the findings back to the literature and to the results reported by other researchers
5. Provide possible explanations for unexpected or non-significant findings
6. Discuss the managerial implications of the study
7. Highlight the main limitations of the study that could influence its internal and external validity
8. Discuss insightful (i.e., non-obvious) directions or opportunities for future research on the topic

The discussion section should not merely restate the findings reported in the result section or report additional findings that have not been discussed earlier in the article. The focus should rather be on highlighting the broader implications of the study;’s findings and relating these back to previous research. Make sure that the conclusions you reach follow logically from and are substantiated by the evidence presented in your study (Varadarajan 1996: 5).

**Conclusion**

In this section, author present brief conclusions from the results of research with suggestions for advanced researchers or general readers. A conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. Not only do author write down the major flaws and limitations of the study, which can reduce the validity of the writing, thus raising questions from the readers (whether, or in what way), the limits in his studies may have affected the results and conclusions. Limitations require critical judgment and interpretation of their impact. The author should provide the answer to the question: is this a problem with error, method, validity, and or otherwise?

Writing an academic article is a challenging, but very fulfilling, endeavor. Hopefully the guidelines presented here will enable you to write your first academic article with relative ease.
Students, however, often underestimate the time required to produce a “poished” first effort. You cannot write a proper research article in a weekend or even in a week. It is, therefore, extremely important to allow yourself enough time—at least three to four weeks—to work on the successive draft.

**Recommendation**

In this section, author present brief conclusions from the results of research with suggestions for advanced researchers or general readers. A conclusion may review the main points of the paper, do not replicate the abstract as the conclusion.

**REFERENCES**


