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Student Affect toward Feedback Provided in High School Classrooms

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Student Affect toward Feedback Provided in High School Classrooms
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has been approved for the Department of Educational Psychology

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Feedback is a vital part of any learning program. Feedback is defined as information provided to a learner that is informative about the results of his or her behaviors. Specifically, this information serves as a guide for future actions and learning; it guides the learner through the material by revealing gaps in his or her knowledge, by correcting any misconceptions, and by providing a roadmap for future learning. In today’s public education, classroom teachers are regularly tasked with providing feedback to hundreds of students in an effort to improve their learning. A challenge in doing this is that each student has his or her own preference for what motivates them in an academic setting (Ames & Archer, 1988). However, an advantage of taking the time to find out what motivates students and asking them what form of feedback they feel works best for them is that students are then afforded the opportunity to take on a feeling of ownership about their feedback (Scheerer, 2003). The short-term goal of this study was to collect and analyze the opinions of high school freshman and to determine what forms of feedback they felt may help them learn the best. The long term goal of this study is to contribute to our growing understanding of how students learn and what can be done to improve the process.
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Introduction

High school freshman who attend public high schools receive a vast amount of information about their progress in school in a variety of different forms. First, they receive end-of-year tests that are administered by the state and are designed to measure how much students know about the different subjects they studied that year. Additionally, students receive report cards once every six weeks, essays with scores and comments, tests scores, quiz scores, and homework grades throughout the year, all of which are designed to inform the students (and their parents) as to whether they have or have not have gained a satisfactory grasp of the information they are required by the school to know.

All of these methods of conveying information about students’ performance can be considered a form of feedback on students’ learning and their achievement of academic goals. Put another way, “Feedback is information about how the student’s present state (of learning and performance) relates to these goals and standards” (Nicol & Macfarlane-Dick, 2006, p. 200). Feedback, in the form of test scores, report cards, and comments, can therefore be useful to students in helping them achieve higher scores and in gaining a better understanding of concepts they have studied in different subject areas. When teachers return essays to their students, for example, they typically have a numerical score, corrections, and comments throughout. These can be rich forms of feedback because they can show students where misunderstandings lie and what the students need to know to correct their conceptualization of the material. A strong understanding of students’ learning and the values they place on understanding the material is important because the degree to which different forms of feedback address different values tend to vary from method to method, making some forms more useful and valued by some student more than others. Thus, it is this variance in what students’ value that complicates an instructor’s
efforts to dedicate the most time and resources to the forms of feedback that will be the most valued and beneficial to students in helping them improve their learning.

The causes of the variance from student to student on the feedback they feel is the most useful to them is not entirely known, but researchers have attributed at least some of this variance to the learning orientation of students. Learning orientations have two different varieties: *performance* and *mastery*. Performance orientation is a descriptor applied to students who typically are concerned with their perceived innate abilities and accordingly justify their performance, good or bad, as an indicator of this innate ability. Mastery orientation is used to describe students whose primary goal of learning is the acquisition of new skills and who have a tendency to relate their performance as a direct indicator of their effort (Ames & Archer, 1988).

The effect these orientations have on students’ preference for one form of feedback over another is due to variance in the types of information provided by different forms of feedback and what types of information they prefer—correctness or ideas. Blumenfeld (1992) found an example of this when the students in his study, who were identified as being performance orientated, showed a displeasure in receiving extra help from the teacher because they had come to associate the extra help as an indicator of low innate ability. The students who were identified as having a performance orientation, therefore, had come to show a strong displeasure for forms of feedback that drew too much attention to them needing extra help, such face-to-face meetings with the teacher and extra comments on their assignments that dealt with corrections.

Another finding that showed that students of a particular orientation prefer some forms of feedback over others was from the study about goals and progress feedback conducted by Schunk and Swartz (1993). In the study it was found that the use of feedback focusing on process
goals rather than production goals motivated the mastery orientated students to perform well and achieve higher by encouraging the mastery of the processes involved in their work.

Why all the focus on students’ opinions and not what teachers think, and do the students really know what works best for them? Students may not always know what works best for them, but they certainly have ideas about what they think works best for them (Hedgcock & Lefkowitz, 1996). Therefore, this opinion about what works for them influences their perception about the feedback they receive; moreover, students’ opinions can be capitalized on through a multitude of methods, the simplest of which is by asking them what forms of feedback they prefer. Just asking students their opinions about feedback has been shown to be enough to give students a sense of ownership about their feedback and increase their reception to the feedback (Scheerer, 2003). Another issue is that there are professional development seminars that gather teachers opinions about feedback and teach them new ways to use it and how to tailor it to their students. There typically are not, however, seminars for students to gather their opinions about feedback and to teach them new ways to use it and respond to it.

With these things in mind, it is important for further study into student preferences about classroom feedback to be conducted. These future studies need to narrow down the number of variables affecting student preferences for feedback, thereby allowing further insight into what forms of feedback are the most effective and why. Thus, it is the goal of this study to find out and discuss the forms of feedback students feel may be the most useful to them and the reasons they feel these types of feedback may be the most useful.

It is with this intent of eliminating potential confounding variables and in the hope of producing data about a specific group of students that this study was limited to high school
freshman history students. With the data for this study having been produced by such a narrowly defined group, it is hopeful that this study will be useful for future studies in determining potentially significant relationships between feedback and students’ grades and between feedback and the course topic.

**Research Questions**

The research questions that guide my inquiry are:

What forms of feedback do freshman high school students think are the most/least useful to them in allowing them to perform well in their history class and why?

Of the following, what form of information typically found on feedback provided in class do students think is the most/least useful to them in improving their knowledge and why: grades, corrections, or comments.

This study was designed with the intent of being an exploratory study. The research question listed are what initially guided the design of the study, but, as a consequence of being an exploratory study, areas covered by the research question were not the only things that were looked for in the analysis of the data received. Many different factors and variables were included in the questionnaires and were analyzed for possible significance, even though they may not have entirely pertained to the research question.

**Understanding the Purpose of Feedback in Classrooms**

Two main topics in the areas associated with student preferences for feedback drove the direction of the research that what was conducted in this study: the type and purpose of the feedback being provided and the learning orientation of the students. This study focuses on the
type of feedback known as formative assessment because of its established benefits in helping students learn (Black & Wiliam, 1998). This study also focuses on the learning orientation of students due to the impacts learning orientations have on students’ preferences for feedback (Ames & Archer, 1988).

**Feedback as a Type of Formative Assessment**

In this study, I am concerned with how feedback is used for *formative assessment* and what opinions students have about different forms of feedback and how they perceive them as useful or not. Feedback used for formative assessment is a method used by teachers to help students advance their knowledge and achieve higher grades by providing them with the information necessary to help them know how to improve in the content covered by the feedback. The other method for using feedback available to instructors is *summative* assessment. Summative assessment, unlike formative assessment, is used only with the intent of informing the student of their current level of knowledge. Summative assessment does not provide, and is not intended to provide, specific guidance to students on how to improve their grades or aid in their studying.

This choice to focus on formative assessment over summative assessment is a result of a review of current literature suggesting feedback that can be classified as formative has been shown to be far more successful at helping students succeed academically than the alternative form, summative. (Black & William, 1998; Hattie & Timperley, 2007) Specifically, these authors state that feedback used for formative assessment helps students learn the material they are studying by providing them with information during the learning process, as opposed to
providing them with information about their performance after the instruction of that topic has ceased.

To further expand on the purpose of formative assessment and why this study has chosen to look at feedback being used for this purpose, it is helpful to think of formative assessment as having three main goals. “For the first action, the prime responsibility for generating the information may lie with the student in self-assessment, or with another person, notably the teacher” (Black & Wiliam, pg. 12). In other words, the first purpose of formative assessment is to show students where they are at currently in their learning of a subject. To accomplish the first goal, the formative assessment tool used by the teacher must either show or aid in the performance of showing a student his or her current level of mastery of a topic, or, it must help the teacher identify the students current level of mastery so he or she can help guide the student’s learning.

The second goal of formative assessment is to show students where they need to be in order to either accomplish their goal (passing the class) or help them achieve the level of mastery they are seeking. This goal is accomplished by facilitating with feedback, “the perception by the learner of a gap between a desired goal and his or her present state (of knowledge, and/or understanding, and/or skill)” (Black & Wiliam, 1998, p. 12). Essentially, the second goal is to show students the gap between their current level of knowledge and the knowledge required by their goal.

The third goal of formative assessment is to provide students with the knowledge and tools they need to close the gap between where they are currently at in their knowledge of a topic and where they want to be. When preparing to use assessment tools to achieve this final goal it
should also be noted that it is closely related to Vygotsky’s (1978) notion of learning within the zone of proximal development (ZPD) wherein a more experienced other guides the novice by providing just enough assistance to facilitate more improvement in a period of time than is possible by the novice proceeding alone.

These three goals do not need to be considered as working in isolation from each other. Rather, they build on one another to help the student learn the material.

**Feedback in Relation to Learning Orientation: Mastery and Performance**

Students in general can be classified as having one of two distinct learning orientations: mastery or performance. Ames and Archer (1988) described people with a mastery learning orientation as attributing their success and failures to being a matter of effort. If a student with a mastery orientation does poorly on a test, it is because in their mind at least, they simply did not study hard enough or make enough effort to learn the information. The primary goal of a student with a mastery orientation is the mastery and acquiring of new skills. These students care more to fully understand the material than simply the act of getting an “A” on the assignment.

Ames and Archer (1988) described students with a performance orientation as attributing their successes and failures to a matter of innate ability. If a student with performance orientation does poorly on an assignment it is because they just are not smart enough and studying would not have made much of a difference. Performance orientated students are also primarily concerned with outperforming others and achieving success through application of as little effort on their part as possible. These students recognize they have to put forth effort but will do as little as possible to achieve the grade they want and are content with not mastering the skills taught by an assignment as long as they receive an “A”.
The effect of a student having one learning orientation or another when it comes to feedback is in how they perceive it being useful to them and meeting their academic objectives. Specifically, what Ames and Archer (1988) found is that feedback that contributes to a competitive learning environment, such as a focus on grades, is detrimental to fostering a mastery orientation because it makes students focus on their performance and their ability to outperform others. This focus on performance and competition is useful however to performance orientated students because it justifies their academic objectives. These students have been justified in their desire to get an “A” and have been rewarded by an emphasis being place on this performance on not the skills they may or may not have mastered.

This emphasis on performance and competition, however, is ultimately seen as negative to fostering a positive learning environment and should be avoided. In their study on the effects of students having either a performance or mastery orientation, Ames and Archer (1988) found that it is through having a mastery orientation that students tend to learn more in the long run by developing a positive perspective on education. This positive perspective encourages the students to engage more with the material and with their own learning.

An important advancement has been made in the years after Ames & Archer’s (1988) study of learning orientations, which helped differentiate the different aspects of performance orientation and remove some of the negative connotations that had been associated with it. The advancement is the distinction that has been made between performance-approach and performance-avoidance orientations. Performance-approach is an orientation which states that students will seek out challenging tasks and engage with them for performance reasons, whereas performance-avoidance states that students will avoid tasks so as to not appear stupid (Eccles & Wigfield, 2002). This distinction helps clarify that students with a performance orientation are
not necessarily at a disadvantage to mastery orientated students and that being performance orientated can still result in positive task engagement.

**Review of Studies on Students’ Reactions to Feedback**

The literature reviewed for this study came from a large number of content areas that included at a large variety of people in different walks of life. The initial review of literature included studies that looked at students in the schools of business, medicine, education, English, and science. Some of these studies included meta-analyses of hundreds of articles, while others focused on individual studies conducted by the authors. After this initial review, the articles were narrowed down to a few that dealt most specifically with the issues covered by this study and were analyzed further for the findings that they contributed to study of feedback and education. These findings were narrowed down even further into two main areas: asking students’ opinion of feedback and determining a student’s ability to use feedback.

**Asking Students’ Opinions on Feedback**

The literature review revealed a number of studies that focused on students’ opinions about feedback. From these studies three main themes relevant to this study became apparent. The first theme is that there is value in even just the act of asking students’ opinions about feedback. The second theme is that students might not know, or will choose not report when asked, the form of feedback that is actually the most beneficial to them. The third theme is that the teaching methods used in the classroom/program can greatly affect what students’ preference for feedback is.
There is value in just asking for students’ opinions.

Of the literature reviewed concerning the value of asking students for their opinion, the study about occupational therapy students’ opinions toward feedback by Scheerer (2003) was particularly representative and confirming. The study focused on gathering formative evaluation data from baccalaureate-level occupational therapy students by asking their opinions on what forms professional behavior feedback they valued. Scheerer used a qualitative design to gather her information from the students, which consisted of using focus groups and semi-structured interviews. Specifically, Scheerer looked at the responses of 28 students, where 26 of them participated in one of four, two hour focus groups. Six students were then chosen as representatives of the group by the original 26 participants and these six participated in half hour interviews individually with the researcher.

Scheerer (2003) concluded her results in the form of four main themes, two of which will be discussed here because of their relevance to this study. First, the students she surveyed specifically stated they wanted and valued descriptive and elaborated feedback. Feedback that was in the form of a check mark or a simple indicator was described as inadequate and that they preferred either descriptive and detailed feedback, or more preferably, face-to-face feedback from the professor because it more accurately, “mirrors a job situation where a supervisor sits down and tells you about your job performance” (p. 209). Second, the students in Scheerer’s study stated that they really valued having their opinions being asked about what form of feedback they found helpful. One student in Scheerer’s study even went so far as to say it was a matter of just asking that was important, that it wasn’t even necessarily important if it made a difference in the teachers decisions. “I think that is really important to get that student feedback. Whether it facilitates a change or not, at least our voices are being heard. I think that is really
important” (p. 209). The conclusions of Scheerer’s study reflect that this was not an isolated opinion and that the majority of students felt this way; the students also reported that it was like a form of therapy for them and that it helped them take on a greater sense of ownership in the feedback they received.

Scheerer’s (2003) conclusions clearly indicate that the students she surveyed placed a strong value on feedback. A concern though is that of the 28 students she surveyed, 26 of them were female. Additionally, all of these students were at the collegiate level of their studies and therefore had money invested in their education and the outcomes of it. These factors all could result in different results than would be found in a survey of high school students, but, the conclusions Scheerer found serve as a promising starting point for data regarding student opinions of feedback.

**Students might not always know what form of feedback is best for them.**

A study about student opinions about feedback in L2 writing classes conducted by Hedgcock and Lefkowitz (1996) was particularly enlightening about what students know about their own feedback needs. Specifically, this study was concerned with what students perceived the purpose of the feedback being given to them was and how they felt it was useful to them in their revisions. This study used a combination of qualitative and quantitative research methods to gather its data. For the quantitative part of the study, The researchers used the results of a university survey conducted with 316 second language learners, which asked about students’ perceptions on intervention practices used in their writing courses. The survey was a 45 item questionnaire that consisted of questions which asked students to answer using a 6-point Likert
Scale. The qualitative part of the study asked 26 of the original 316 students to take part in one or more semi-structured interviews.

In their study of student opinions in L2 writing classrooms Hedgcock and Lefkowitz (1996) found from their analysis two main conclusions. The first conclusion they came to was that the type and manner of the feedback given by the instructor helped determine what forms of information students valued. They came to this conclusion by examining and comparing the trends found amongst the student response patterns of foreign language (FL) students and English as a second language (ESL) learners and how the patterns related to the different practices of FL and ESL teachers. The second conclusion the authors found was that there may be a disconnect between the forms of feedback some students find the most useful for helping them improve and where they may actually need improvement. Hedgcock and Lefkowitz posited that students may not be reporting the feedback that would actually be the most useful to them as the form they find the most useful and instead by listing the feedback that reflects the areas they are already the strongest in.

Hedgcock and Lefkowitz’s (1996) conclusions are based on a large number of students and a well-researched survey form. Their quantitative data is also backed up through the use of qualitative data retrieved from some of the same students who participated in the quantitative portion of the study. Therefore, their findings are taken as a good starting point for knowing how to design a quality study and what complications may arise when asking students for their opinions about what form of feedback they think is the most useful.
Classroom teaching methods help determine what feedback students value.

The last theme found in the review of literature that was relevant to this study was in a study concerning the feedback preferences of senior year medical students in five Canadian universities (Parikh, McReelis, & Hodges, 2001). This study looked at students’ satisfaction with the types of feedback they received in medical education at schools that used Problem Based Learning (PBL). This study gathered opinions from 103 final year medical students from five schools located in Ontario, Canada. Quantitative analysis was the sole form of data collection used in this study, which collected its data by emailing a survey form to the participants.

The conclusions found in this study are based on student opinions of effect feedback in a learning environment that uses a Problem Based Learning (PBL) model. PBL is a student-centered learning model that tasks students to learn about a subject in the context of complex, realistic, and multifaceted problems. Working in groups is a key component of this learning model. What this study concluded is that in schools that use the PBL model, students have a strong preference for timely feedback in a face-to-face individual or group model. Even in the presence of much more frequent written comments, grades, and corrections, students overwhelmingly preferred the individual- and group-based feedback.

The problem with relating this study to a high school classroom is that it focuses on a PBL instruction model, which is not reflective of the learning models used in most U.S. public school classrooms. This study is helpful, though, because it shows that, even in the absence of their preferred form of feedback from their classroom, students will still request and list the forms they think are the most useful.
Student Ability to Use Feedback

The articles considered in the review of literature that dealt with students’ ability to use feedback resulted in two central themes relevant to this study. The first theme is that students who perform well academically make better use of feedback than those who perform poorly. The second theme is that feedback will always be inadequate unless it has knowledge resulting from effective instruction to build on.

Poor academic performance results in poor utilization of feedback.

The theme that students who perform poorly are less able to utilize feedback than students who perform better on assignments is the primary conclusion of the study looking at the students’ role of processing feedback in a class room conducted by Gagne et al. (1987). This study was concerned with students’ perceptions of their ability to understand the feedback given to them and their dwelling on their negative affect that resulted from their making errors. Thirty-eight students were involved with this study and had their data collected by observations made by the researchers and retrospective reports made by the students.

The first conclusion reached by the researchers was that attention paid to feedback regarding missed items was substantially more useful then attention paid to feedback regarding correct items. The usefulness of this attention was measured in subsequent performance by the student in the class. The second finding found by the researchers was that the students who did better on the assignment being reviewed were much more likely to be on topic and following along with the teacher who was going over the corrections than were students who did poorly. Additionally, students who did better on the assignment were found have learned more from the corrections and processed the feedback at a deeper level, which was measured by their retention
of the material. Students who did poorly on the assignment were noted to process the feedback much more poorly and this was attributed to the fact that: (a) students who did poorly reported that they felt they were less able to understand the feedback, and (b) they were more preoccupied and upset by the fact that they had performed poorly.

These conclusions show that performing poorly is a double threat to students’ learning, in that, not only do they initially fail to grasp the material which is important for subsequent learning, but they also proceed to fall further behind in their learning due a failing to benefit from feedback regarding their mistakes because they are upset about their poor performance. What this means for this study is that it is important to pay attention to students’ perceptions of their own grasp of the knowledge and their performance in the class.

**Feedback must have prior knowledge to build on.**

The theme showing that feedback must have prior knowledge to build on was shown most clearly by the meta-analysis focusing on the power of feedback done by Hattie and Timperley (2007). In their meta-analysis of over 500 articles these researchers focused primarily on what feedback is and on what makes it effective. Their primary conclusion, however, that is most salient to this study is that feedback is not the solution to learning problems; rather, it is but one answer. What the authors conclude is that feedback is only helpful when supported by a well-maintained learning environment and by effective teaching. They state specifically that “feedback can only build on something, it is of little use when there is no initial learning or surface information” (Hattie & Timperley, 2007, p. 104). Therefore, it is important to make sure that students are receiving adequate instruction of the material before they are presented with feedback to support it.
The conclusion of this article raises a very important concept to be kept in mind when looking at feedback. It is important to make sure that students are receiving a sufficient amount of instruction about the material being presented before being asked to rate the effectiveness of the feedback they are receiving. Otherwise, the feedback they are receiving will, no matter its intentions, be seen as insufficient because it has nothing upon which to build.

**Putting It All Together**

There are many important lessons to take away from the studies just reviewed. First, the act of asking students what form of feedback they think helps them the best may in itself produce an improvement in how students view the effectiveness of their feedback. This is a result of students taking a greater sense of ownership in their feedback because they feel they have contributed to it. The next lesson is that students may not always know what feedback is actually the most useful to them and may instead report the feedback that reflects the area they are already the strongest in. Another lesson to be taken away is that student opinions about what form feedback they value the most can be strongly influenced by the type of instruction model used in the classroom. It should also be kept in mind that the performance of the student in the class can directly impact how useful they find feedback, as strong performers have been shown to benefit from feedback more than students who are performing poorly.

Finally, the last thing that should be taken away from this review of relevant studies is that feedback can only build on knowledge. Therefore, it is important to assure that adequate instruction of the material feedback is being provided on has occurred; otherwise any feedback being provided will insufficient.
Methods, Data Sources, and Approach to Analysis

Study Population

This study was conducted at a medium-sized public high school in Texas. The school was chosen primarily due to the level of accessibility and cooperation afforded to the researcher by the teachers and staff. The school has approximately 340 students registered in its freshman class history classes during spring 2011.

In total, of the 204 participants who took part in the survey, 90 were male (44%) and 114 were female (56%). The ages of the students primarily fell between the 14-16 age ranges, with only a few outliers above these ages (14 – 28%, 15 – 58%, 16 – 11%). The students’ data were divided into three class groups based on which of the three teachers they had, with each teacher being given a two letter code based on their name. The distribution of the students between the three classes is as follows: LW – 31%, BT – 35%, and EL – 34%. The ethnicity distribution of the survey sample was: 55% White/ Caucasian, 21% Hispanic, 22% Black/ African American, 1% Native American, and 2% Asian / Pacific Islander. It is worth noting that these percentages for ethnicity represent the population sampled quite well, with variances of no greater than a 5% shown for any single category.

Three teachers were also involved in this study. The teacher for class group LW is the most senior of the history teachers and is the only teacher certified to the Advanced Placement (AP) classes. Therefore class group LW consists entirely of AP students. The teacher for class group EL is the second most senior history teacher and only teaches regular placement students. The teacher for class group BT is the most junior of the history teachers and also only teaches regular placement students.
Methods

Every student who was present on the day their freshman history class was scheduled was given a consent and assent form to have signed and returned. In total, 206 students returned both forms signed and completed and were eligible to participate in the survey on the day of the survey. Out of the 206 that returned the forms, 204 completed and returned the survey to the researcher. One student chose not to participate after returning both forms and one incorrectly indicated the responses on the survey form by circling multiple answers for each question, making it impossible to determine the intended answers.

Three teachers were also issued a consent form and a survey as a result of one or more students in their class being involved in the study. All three of the teachers completed and returned both of their forms.

Instruments

The forms used in this study included: survey forms for students and survey forms for the teachers. These forms were designed to be similar to the ones used by Ames and Archer (1988) and Hedgcock and Lefkowitz (1996). The reason for the similarity is due to the fact that studies done by these researchers looked at similar research questions and received favorable amounts and quality of data from their implementation. It was hoped that by tailoring their survey forms to the aspects looked at by this study, similar data returns would result.

The student survey consisted of three parts. The first part asked students to indicate their age and ethnicity. This was done for two purposes. First, the students’ age and ethnicity was asked for to help further specify the characteristics of the study population for comparisons to studies in the future. Second, the students’ age and ethnicity was asked for, for use in the analysis.
of the data to determine if certain trends might be found when certain characteristics were controlled for, as done in the Gagne et al. (1987) study when they controlled for student performance scores. Each survey was marked with a set of class identification letters so that the students’ survey could be linked with their teacher’s survey.

The second part of the survey asked students to indicate their opinions on the usefulness of various forms of feedback received in their history class through the use of a Likert scale. These questions asked students to indicate how they felt about the ability of different forms of feedback to increase their performance in the class (examples: quiz scores, test scores, essay corrections). The reasoning for this form of questioning came from their use in the study by Hedgcock and Lefkowitz (1996), who in turn justified their application by their use by Leki (1991). These authors justified the use of this method due to its ability to collect large amounts of data about a topic and at the same time validate these answers through asking the same question in different ways.

Third, the survey asked students to answer five free response questions about their opinions on the various forms of feedback received in their history class and how they helped them achieve their academic goals. The addition of the forms of questions was done for two reasons. The first reason was add a way to check for performance and mastery orientations by allowing students to express their answers in their own words. The second reason was to gather more descriptive information, similar to what was done by Hedgcock and Lefkowitz (1996) in the follow up interviews they used after survey, but, to be able to do so within the constraints present during this study. (See appendix for the survey.)
The teacher survey consisted of two parts. The first part of the survey form was identical to the one given to students and asked the teacher to indicate their age, ethnicity, and class identification letters. The second part of the survey form asked teachers to indicate how often they thought that they used certain forms of feedback and different types of assessment tools. The survey form offered teachers a set of predetermined answers, as well as a free response option if they used other forms of feedback. The reasoning for the teacher survey was to obtain a reliable indicator for how often different forms of feedback were provided to the students. This information was determined as important after the review of the Parikh, McReelis, and Hodges (2001) study demonstrated that this was an important factor when analyzing students preferred forms of feedback. (See appendix for the teacher survey).

**Survey Procedure**

The issuing of the consent and assent forms, as well as the completion of the survey forms, spanned the time of one week. The consent and assent forms were distributed to students by the researcher on the Tuesday and Wednesday of the week that the survey took place.

All students were given a word search form on the day of the survey, and the students who had returned both forms signed and completed were also issued the survey forms. The decision to give all students word search forms was done after the issue of anonymity was raised during the initial approval process of the study. The form, which was just a standard word search, served the purpose of assuring that all students had some form of paper on their desk so that the teacher could not tell which students were taking the survey. The importance of this was also to assure that students felt safe to answer honestly without reprisal.
After all of the survey forms were completed, the researcher then collected both the survey forms and word searches from every student’s desk. During the initial administration of surveys for each teacher, the instructor was handed their survey form by the researcher, who would then collect it at the end of the school day.

**Data Analysis**

After all of the survey forms were administered, they were analyzed and their information was coded. The method for this analysis was similar to that done by Parikh, McReelis, and Hodges (2001), where they coded the responses into numbers so that they could compare the number of instances each form of feedback was reported with various other factors. This form of encoding was helpful in the analysis of the data in this study due to the number of relevant factors data was also gathered on. By analyzing the data in this way, it was possible to conduct a comparison across all of the factors to look for trends and draw conclusions about correlations.

This coded information was then inputted into SPSS for statistical analysis. The statistical analysis of the data entailed: tallying, graphing, comparing, and cross tabulating the various independent variables with the question answers so as to draw conclusions about what forms of feedback the students most often preferred, why it was preferred, and what they used it for. The variables in the data were then also checked to see if any valuable correlations could be drawn about the conclusions.

**Analysis of Survey Responses**

The analysis of the survey questions required some special considerations and procedures to fully explore and understand the results received from the students. The special considerations
refer to the answer trends received for the Likert-scale answer choice questions and the special procedures refer to the coding process used to analyze the written question section.

**A Bell Curve Found in the Likert Answer Choice Responses**

To begin the detailing of the answers to the Likert questions, it is important to start off with the most notable trend found in this section. For the majority of the thirteen questions, there was found to be a standard bell curve for answers responses found. The apex of this bell curve centering on the “agree” answer choice with an average of 46% of all answers received for each question indicating this response. The remaining answer responses typically fell on either side of “agree”, indicating a choice of either “strongly agree” and “Neither agree or disagree”. The average for the rest of the answer choices are as follows: “Strongly Disagree” – 4%, “Disagree” – 12%, “Neither Agree or Disagree” – 15%, and “Strongly Agree” – 22%. Thus, this answer trend will be what caused the method chosen for statistical conclusions of the next section regarding the Likert question Answers.

**Procedure Used for Coding the Written Question Responses**

The second section of the survey asked students to write their opinions about five different questions. I coded the answers with a modifier to indicate rather the students expressed a performance orientation or a mastery orientation. The reason for this was to give the student’s answers a greater degree of multi-dimensionality so as to better reflect the intentions in which they wrote them. In other words, this section was intended to give students the opportunity to express the reasons why they thought certain forms of feedback are the most useful to them; therefore, to have the data reflect this intention it was necessary to make the information that was coded reflect the intentions in which each answer was given by the students. Additionally, what
this allowed for was to further explore the ideas presented by Blumenfeld (1992) and Schunk & Schwartz (1993), which state that mastery- and performance-orientated students prefer different forms of feedback.

To apply this indicator, however, two separate approaches were completed for the first two questions and the last three. This separation of approaches is due to the differing nature of the answers in the section, with the first two eliciting straightforward answers, and the last three being more open ended. For the first two questions, the students’ answers were recorded directly as indicated by the students but coded as either being mastery or performance depending on the answer choice. For the last three questions, in addition to recording the students answer choice as indicated, a more elaborate procedure was implemented for determining which modifier to add to each recorded response. This procedure required that I considered each student’s answers to search for indicator words and phrases that revealed the motivation orientation indicated by the students’ answers. This process for the majority of the survey form was fairly simple as most students answered in complete and elaborated sentences. In some instances however this process being much more involved. For example, in cases where students would answer in one word sentences, a process was done to analyze and judge the student’s responses to other, similar questions, so a determination could be made about how to code the answer.

An example of an easy response to encode is when a student responds in a full sentence and states the intention of his or her response. “I use returned quizzes to get a better understanding of the material covered on them.” With this response, it is easy to determine that this answer will be coded as mastery. Other words frequently used that were used to code a response as mastery include: “fully understand”, “learn fully”, and “better grasp”. An example of a harder response to code for performance would be “returned homework”. To code this
response, I had to look at written question one and find out that the student indicated he or she only cared about the grade. I then proceeded to also check the other written questions for another mention of “returned homework”. When I did not find any other mentions, I made the decision for this response to be coded as performance. Other words frequently used that were uses to code a response as performance include: “best grade”, “perform the best”, “score higher”, and “right answer”.

**Background to the Written Questions**

The background discussion here consists of the purpose of each of the written questions and the answer trends of the students’ responses. This background discussion is provided here so that the discussion in the findings section can be done so in a greater context to the questions intentions.

**Determining a Preference for Grades, Understanding, and Competitiveness**

The first written question asked students to indicate rather it was more important to receive an “A” on a difficult assignment or to fully understand the material and why they felt that way. This question was included to determine in a fairly direct way what form of orientation they may have. If they answered it was more important to get an “A” than they were coded as having a performance orientation, and a mastery orientation if they indicated it was more important to fully understand the material. The majority of the students answered performance with 48.5% (see figure 1 for a full list of results for question 1).
Table 1

Student responses to written question one.

<table>
<thead>
<tr>
<th>Written Question 1</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstained</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Performance</td>
<td>99</td>
<td>48.5</td>
</tr>
<tr>
<td>Mastery</td>
<td>86</td>
<td>42.2</td>
</tr>
<tr>
<td>Performance and Mastery</td>
<td>17</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The second written question asked students to indicate if they would be more upset about getting a 73 out of a 100 on a history test or by their best friend getting an 85 when they scored a 73. This question was included to determine the competitiveness of students. It designed in accordance to the findings of Ames and Archer (1988) which states that performance orientated students are concerned with being competitive and mastery students are not concerned with competitiveness. The findings for this question, however, indicate that it may not have accomplished its purpose. Overwhelmingly students responded with an internal motivation, with 89% reporting internal, which would if it were to be interpreted as is, that almost 90% of the students were mastery orientated. I however suspect the question was not worded well enough to be an accurate measure of orientation as the other written questions give more realistic percentages for mastery and performance orientated students (see figure 2 for a full list of results from written question 2).
Table 2

Student responses to written question 2.

<table>
<thead>
<tr>
<th>Written Question 2</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstained</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>Internal</td>
<td>181</td>
<td>88.7</td>
</tr>
<tr>
<td>External</td>
<td>9</td>
<td>4.4</td>
</tr>
<tr>
<td>Internal and External</td>
<td>13</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Determining the Value of Different Forms of Feedback to Students

A couple of background facts are important to the understanding of the following questions. First, the numbers for a particular form of feedback indicate how many times that form of feedback was listed as useful. Second, students were not limited to indicating just one form of useful feedback. Third, it is during these three questions that the answers will be differentiated between being cited as useful for a mastery goal or for a performance goal based on the interpretation of their comments. A complete list of the students’ responses is located in the appendix and only the more notable statistics will be listed in the following three descriptions.

The third written question asked students to indicate which forms of information on returned assignments is useful to them and how. For this question students were prompted to answer with generic types of information: grades, written questions, and corrections. The purpose of this question was to get an idea of what types of information was important to them across all forms of feedback. The intention of these results was to learn what information students found important and to see if their teachers were including them on their feedback (through the use of the teachers’ survey forms). The form of information students reported as
being the most useful was Question Corrections with 41% of all responses received. (For a full list of responses to written question 3, please refer to figure 3.)

<table>
<thead>
<tr>
<th>Written Question 3</th>
<th>Totals</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstained</td>
<td>9</td>
<td>3%</td>
</tr>
<tr>
<td>Question Corrections - Performance</td>
<td>52</td>
<td>20%</td>
</tr>
<tr>
<td>Question Corrections - mastery</td>
<td>55</td>
<td>21%</td>
</tr>
<tr>
<td>Written Comments - Performance</td>
<td>17</td>
<td>6%</td>
</tr>
<tr>
<td>Written Comments - Mastery</td>
<td>39</td>
<td>15%</td>
</tr>
<tr>
<td>Grades – Performance</td>
<td>59</td>
<td>22%</td>
</tr>
<tr>
<td>Grades – Mastery</td>
<td>33</td>
<td>13%</td>
</tr>
</tbody>
</table>

The fourth written question asked students to indicate what resources from class that they find the most useful when studying for an upcoming history test and why. The intention of this question was to allow students express what forms of feedback they felt were the most useful for performing well on a test in their class. The Likert Questions already asked about the usefulness of these questions but did not give the students the ability to specify which where the most useful to them. Students reported Homework Assignments as the most useful feedback for study for tests with, receiving 37% of all responses. (For a list of the top three answer response categories, refer to figure 4.)

<table>
<thead>
<tr>
<th>Top 3 Response Categories for Written Question 4</th>
<th>Totals</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Assignments - Performance</td>
<td>83</td>
<td>20%</td>
</tr>
<tr>
<td>Homework Assignments - Mastery</td>
<td>71</td>
<td>17%</td>
</tr>
<tr>
<td>Quizzes – Performance</td>
<td>51</td>
<td>12%</td>
</tr>
<tr>
<td>Quizzes – Mastery</td>
<td>33</td>
<td>8%</td>
</tr>
<tr>
<td>Notes – Performance</td>
<td>31</td>
<td>7%</td>
</tr>
<tr>
<td>Notes – Mastery</td>
<td>28</td>
<td>7%</td>
</tr>
</tbody>
</table>
For the fifth written question, students were asked to indicate which forms of feedback do they find useful in helping them do well in their history class and why. The goal of this question was to afford students the opportunity to state which form of feedback they felt are the most useful to helping them do well in their history class. The difference between this question and written question 4 is in its indication of what the feedback is for. Written question 4 is specific to tests whereas written question 5 is more general to the class in general. This difference in this wording proved to have an effect on orientation responses, and is discussed in the discussion section. Students reported homework corrections as the most popular response with 33% of the answers. (For a list of the top three response categories please refer to figure 5).

<table>
<thead>
<tr>
<th>Top 3 response categories for Written Question 5</th>
<th>Totals</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Corrections - Performance</td>
<td>51</td>
<td>17%</td>
</tr>
<tr>
<td>Homework Corrections - Mastery</td>
<td>48</td>
<td>16%</td>
</tr>
<tr>
<td>Test Scores – Performance</td>
<td>60</td>
<td>19%</td>
</tr>
<tr>
<td>Test Scores – Mastery</td>
<td>38</td>
<td>12%</td>
</tr>
<tr>
<td>Essay Comments - Performance</td>
<td>16</td>
<td>5%</td>
</tr>
<tr>
<td>Essay Comments - Mastery</td>
<td>27</td>
<td>9%</td>
</tr>
<tr>
<td>Quiz Scores - Performance</td>
<td>19</td>
<td>6%</td>
</tr>
<tr>
<td>Quiz Scores – Mastery</td>
<td>24</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Findings**

In the next section I will take a closer look at three of the more important findings found in the survey data results. The reasoning for choosing these three findings, specifically, is based on their statistical significance. In the case of the Likert scale questions, significance is defined here as results of questions that received a number of responses in the third standard
deviation when compared across all of the data gathered for that question. In the case of the written questions, the significance is implied by a pattern being apparent to the researcher with data showing support for the evidence of the trend.

Two of the findings, located in the Likert questions section, broke the bell curve with answers responses in the third standard deviation when compared to the other answers for that section. The final finding was the most prominent and important trend found in the written question section, showing a trend that reached across four of the five questions in that section.

The Advanced Placement Class Group Responds Positively for Quizzes

An analysis of students’ responses to the first Likert Question reveals a statistically significant amount of responses for “agree” from the AP class group. In this prompt, students were asked how much they agreed with the statement, “My history quiz scores are helpful to me in determining how much I know about the topic covered by the quiz.” The reason this questions results are significant is because the number of “agree” responses received for the “agree” answer choice for this question is in the third standard deviation when compared against all “agree” responses. (62%, M=46%, SD=7.4%).

The Importance of Question Placement

The eighth question in the Likert section also produced statistically significant findings. The question asked students to rate their opinion on the comment, “The comments on my history essays help me to better understand the material covered by the essay.” For this question, the answer responses received were statistically significant in both the “strongly disagree” and “disagree” answer choice options. The “strongly disagree” answer response was found to be statistically significant with a percentage response in the third standard deviation when compared
against the “strongly disagree” responses received for all the questions in this section (10%, M=4.3%, SD=2.1%). The “disagree” answer response was also found to be statistically significant with a percentage response in the third standard deviation when compared against all other percentages of “disagree” responses for the other questions in this section (26%, M=12.1%, SD=5.2%).

**Performance / Mastery Differences Amongst the Class Groups**

The first written question, which asked students if it was more important to get an “A” or fully understand the material of a difficult history assignment, showed statistical significance when a comparison was done with the class groups by receiving enough answers to place that answer category in the third standard deviation when compared against the other questions responses. The comparison revealed that two class groups, BT and LW showed strong preferences for performance; while the third class group, EL, showed a strong preference for mastery. Class group BT had 43 students (61%) respond with a performance objective and 23 students (32%) respond with a mastery goal. Class group LW, also showed a favoritism for performance goals with 34 students (53%) responding in favor of performance, while only have 23 students (36%) responding for mastery. Class group EL on the other hand only had 22 students (32%) respond with a performance objective, while having a substantial 40 students (58%) respond with a mastery goal. Overall, the majority of students preferred performance with 99 (49%) answers being recorded as performance and 86 (42%) for mastery.

The third written question asked students what is the most helpful information on the assignments that that they receive back from the teacher and the results of this question showed that the preferences for mastery and performance displayed by each class group varied somewhat
from the last question. The data showed that for question three: class group BT still favored performance, class group EL showed mixed results, and class group LW showed a preference for mastery. Class group BT submitted 51 responses for performance (61%) and 30 for mastery (37%). Class group EL students submitted 40 responses for performance (47%) and 45 responses for mastery (53%). Class group LW students submitted 37 responses for performance (41%) and 53 responses for mastery (59%). Interestingly, the finally tally for over all responses for performance and mastery for all three class groups together was an even split of 128 responses for each.

For the fourth written question, which asked students what forms of feedback they found useful for studying for an upcoming history test, the results showed that every class favored performance. Class group BT still consistent, had 84 responses for performance (64%) and 47 responses for mastery (36%). Class group EL completely switched preferences on this question with 80 student responses for performance (59%) and 56 responses for mastery (41%). Class group LW showed a mixed preference in this question with 80 student responses for performance (53%) and 70 student responses for mastery (47%). 417 answers were recorded, with 244 of them being for performance goals (59%), and 173 of them being for mastery goals (41%).

For the fifth written question, which asked students which forms of feedback helped them to do well in their history class, the results showed two class groups with mixed preferences and one class group favoring performance. Class group BT again shows preference for performance with 58 responses being recorded as performance goal based (62%) and 36 responses being recorded as mastery goal orientated (38%). Class group EL showed mixed results with 52 responses for performance (48%) and 57 responses for mastery (52%). Class group LW also showed mixed results with 50 responses for performance (48%) and 55 responses for mastery
Overall for question five, 308 responses were recorded, with 160 of them being recorded for performance (52%) and 148 of them being recorded for mastery (48%).

Discussion

The following discussion section will cover possible causes and conclusions that have been drawn using the data from the survey. This discussion will cover three main areas: the advanced placement classes showing a strong preference for quizzes, the potential importance of proper question placement, and the performance/mastery differences amongst the class groups.

The Advance Placement Students Place Value on Quiz Scores

The first question students were presented with on the survey asked them to rate how they felt about the question, “My history quiz scores are helpful to me in determining how much I know about the topic covered by the quiz.” The significance of this question comes from a comparison of class groups to answer responses. In this comparison it is shown that the class group LW was responsible for 62% of all the “agree” answer responses received for this question; while having almost an equivalent number of students as the other classes (31%). Another factor that further makes this statistic important is that according to the teacher’s own self reports via his survey questionnaire, he rarely, if ever gives the students in this class group quizzes.

So what conclusions can be drawn about this? In an attempt to understand why students indicated that they found quiz scores so helpful, I reviewed their answers to other questions on the survey to find out if they mentioned the value of quizzes. I found that quizzes were not mentioned as being useful in any telling amount of instances for this class group. The next step
in making sense of this occurrence comes from a look at the other class groups’ reports on quizzes to see if those students placed value in quizzes in the written questions.

When looking at written question four, which asked student what forms of feedback did they find useful when study for a history test, a pattern is shown that is related to the question of Likert question one’s significance. First, class group LW reported returned quizzes being useful 20 times out of 150 recorded answer responses (13%). Class group El reported quizzes being useful 36 times out of 136 recorded answer responses (26%). Class group BT reported quizzes being useful 28 times out of 131 recorded responses (21%). What is important to note about this is that both of the teachers for class groups EL and BT reported using quizzes more often than class group LW; the teacher of class group EL reporting this use of quizzes monthly and the teacher of class group BT reporting quiz use bi-monthly.

The conclusion here does not come from an increase of use of quizzes, however, as the increase of use is not proportional with the increase of responses for its usefulness. A closer look at the teachers’ surveys though reveals one other difference that may explain the percentage differences. The teacher for class group EL reported having, in addition to multiple choice (MC) and matching (M) questions, short answer (SA) questions; whereas, the teacher of class group BT reports only using MC and M questions. Additionally, the teacher for class group EL also reports making written corrections on every quiz in addition to orally making comments on every quiz; the teacher of class group BT on the other hand reports never making corrections on quizzes and rarely making comments on them.

One final consideration to keep in mind, though, is that students may not necessarily be reporting the form of feedback that may help them the most, but, that they may be reporting a
form of feedback they think would validate an area where they are already performing strongly. This potential for false student reporting was suggested by the conclusions reached by Hedgcock and Lefkowitz (1996) in their study of student opinions on feedback in L2 writing classes and may be the case here. If this were to be the case, then the students in this class group may feel that quiz scores would validate their performance level in the class, more so than for their ability to help them study.

So to conclude, the evidence from this study suggests that the statistically significant “agree” percentage recorded for class group LW is a sign that the students from this class group value quiz scores as a valuable form of feedback, even if the reason they value them may be for the validation of their current level of performance, more so than for the potential to help improve their knowledge or grades.

The Importance of Question Placement

The eighth question of the survey is of interest due to its answer responses receiving two statistically significant percentages of “strongly disagree” and “disagree” when compared against the trend of the other questions. The question, which asked students to rate their opinion about how helpful comments on history essays are, showed only one important trend which appeared in the comparison of the class groups.

Class group LW was responsible for only 16 of the 17 total votes for “strongly disagree” and “disagree” (22%), while also being responsible for 18 of the 28 votes for “strongly agree” (64%). The other two class groups were roughly equivalent in their response rates for all answer choices. To check for further importance of these findings a look at all class groups’ teachers was taken to compare them for difference concerning essays and comments on them. No data of
particular importance was found in frequency of essays, as one teacher assigned more essays than the teacher for class group LW and one teacher assigned fewer. A difference was found, however, in the reports of the frequency of corrections and comments made on the essays. The teacher for class group LW reported making corrections and comments on every essay while the other to class groups’ teachers reported rarely if ever making corrections or comments on essays. No major differences were noted in the types of comments the teachers left on the essays.

Referencing the students responses to written question three, four, and five also provided some support for class group LW’s preference for written comments on essays. On the third written question, class group LW reported preferring written comments being helpful to them on returned assignments in 27 of the 89 responses (30%); whereas class groups EL and BT only reported written comments being helpful in 14 out of 85 responses (16%) and 15 out of 81 responses (19%) respectively. Additionally, the results of written question five, which asked students, which forms of feedback they find the most helpful in doing well in their history class had the most supportive results. Class group LW had 21 responses out of 105 (20%) for essay comments helping them do well in their history class; this compared to the results of class groups EL and BT who had 9 out of 109 (8%) and 13 out of 94 (14%) responses, respectively.

A counter argument against the previously supporting evidence is the location of the question on the essay. Due to how the survey was printed, question eight was cut in half, resulting in the first half of the question and answer choices “strongly disagree” and “disagree” being located on the front page, resulting in the second half of the question and the remaining three answer choice being located at the top of the reverse side of the sheet.
It was noticed in a number of instances during the coding process, that students first chose between the two choices on the front of the page, then noticed the choices on the back side of the paper, then decided to change their answer by scratching out the answer choice on the front page and changing it to one on the back page. However, while this was the case in a large number of the surveys, it is my opinion that a larger number students simply did not bother to change their answer after indicating a choice on the front page and then noticing the remaining answers on the back of the page.

This counter evidence is also supported by the fact that it is possible to determine what the question is asking by only reading what is visible on the front page. “The comments on my history essay help me to better. . . ” It is also suspicious that it is on this question that two statistically significant answer choice percentages is present and that the two answer choices that are significant are the one located on the front page.

These fact, combined with the fact that all of students in class group LW and only the students in class group LW were AP students, may prove problematic in the conclusions that can be drawn about this question.

To conclude, based on my analysis of the survey results, the double third SD statistics found in the “strongly disagree” and “disagree” answer responses of this question are a result of the location of the question on the survey. The evidence I have gathered suggests that the evidence supporting the claim that the importance found in the class group response rate is a result of the essay comment practices of the teacher, are not supported strongly enough by the numbers to overlook the probability of other, less motivated students in other class groups,
simply circling one of the two choices presented in front of them; instead of first looking on the back of the survey for the remaining answer choices.

**Performance / Mastery Differences between Class Groups**

Across all of the written questions, there was a pattern for class group BT in its preference for performance mastery responses. The other two class groups on the other hand have showed a mixed preference for performance and for mastery, often switching from one question to the next. In this section I discuss the possible reasons for these differences.

While the specific numbers were discussed in an earlier section, it is helpful here to restate the preferences of each class group, performance or mastery, for each written question and by what margin (see figure 6 for a review of the class group preferences for mastery or performance).

<table>
<thead>
<tr>
<th>Preferences for Performance or Mastery</th>
<th>LW</th>
<th>BT</th>
<th>EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Question One</td>
<td>Performance-53%</td>
<td>Performance-61%</td>
<td>Mastery-58%</td>
</tr>
<tr>
<td>Written Question Three</td>
<td>Mastery-59%</td>
<td>Performance-61%</td>
<td>Mastery-53%</td>
</tr>
<tr>
<td>Written Question Four</td>
<td>Performance-53%</td>
<td>Performance-64%</td>
<td>Performance-59%</td>
</tr>
<tr>
<td>Written Question Five</td>
<td>Mastery-52%</td>
<td>Performance-62%</td>
<td>Mastery-52%</td>
</tr>
</tbody>
</table>

To understand this pattern, the first task is to see if it can be determined if any other factors might be influencing these results. Written question three asked students what forms of information on their assignments they get back are the most useful. A similarity arises here between the two classes that reported a mastery preference, LW and EL, both of which reported
question corrections for mastery more often than any other factor. Class group BT reported
grades for performance as their most useful by a wide margin. This finding is strengthened by
the teachers’ surveys which report that both of the teachers for class groups LW and EL make
corrections on every assignment that give back, whereas the teacher for class group BT rarely, if
ever, makes corrections on anything he gives back.

Written question four asked students to indicate what materials and feedback they found
the most useful when studying for an upcoming history test. This questions results are somewhat
confounded by the wording of the question. The questions wording can be taken as being
performance orientated from the start according to how Ames and Archer (1988) define
performance orientation. By asking students what they use to prepare for a test and thus
essentially asking them what they use to perform well, the question is encouraging a competitive
goal to the use of the feedback and is appealing to a performance nature. This will not
necessarily change how students perceive their orientation, but it may result in performance
orientated students thinking of and listing more forms of feedback useful to this goal; more so
than the mastery students who may actually be discouraged by this wording and list fewer forms
of feedback.

This performance wording taken into account, the number one response option for every
class was returned homework assignments. In two of the class groups, BT and EL it was
homework for performance; only in class group LW was the highest homework for mastery and
even then it only beat out homework for performance by two responses. It is, thus, the
conclusion for this response that performance switch in class groups EL and LW is a result of the
narrowness and wording of the question.
Based on my analysis of the data, it is a combination of the presence / absence of corrections on assignments, students being classified as AP, and question wording that explains the trends present in the survey data. The data showed in the third written question that the presence of written corrections strongly impacted the performance / mastery preference in such a way that if it were a teacher’s goal to facilitate mastery orientated mindsets, to encourage that to put corrections on the papers they return. Second, AP classrooms, families, and kids tend to viewed as having a strong desire to perform, considering the pressures for college admissions and class rank; more so at least than kids in the general track classrooms. This would potentially explain the performance result for class group LW on the first written question. The question wording of the forth written question seems to be geared to illicit a more slanted trend toward performance over mastery, with this being reflected in the overall distribution for that question being 59% in favor of performance.

A final consideration is that numbers reflected in questions three through five reflect multiple responses from individual students and not a single student for each response. This approach was taken so as to be able to account for equally valued forms of feedback to be expressed and not limit the responses. This does have the potential weakness though of potentially allowing an elaborative mind set of students, or as suggested about question wording encouraging the practices of one orientation over another, to have a stronger weighting on the results. Therefore, it is a reminder that these conclusions are based solely on the data received in this study and are not being stated as fact in instances outside of the scope of this study or as proofs of causation.
Conclusions

Feedback is a necessary and integral part of the learning process. It helps guide the learner in the learning process by showing them where their knowledge level is currently, where they need to go, and how to get there. This is especially true in schools where teachers have on average thirty students per class, and five to six different classes. All of these students have preferences for what forms of feedback they think work best for them and each has his or her own goal and orientation for learning. Therefore, if the teacher is going to be able to help each student with the feedback he or she can give in the time he or she has to give it, some general guidelines for effective feedback are necessary.

This has been the premise for the survey that was conducted at a medium-sized high school in Texas. The survey looked at 204 students’ responses to questions about what forms of feedback they think help them the most and how their answer response trends tend to relate to the types and varieties of feedback provided in their classrooms.

Four main conclusions were developed from the analysis of the survey results. First, some students like having quizzes assigned for either their potential to validate their performance or to help them improve. Second, when conducting a survey it is important to pay close attention to the placement of questions on the form. When questions are cut in half, it can affect students’ answer choices by causing them to choose between the two answer choices present on the first page without turning the page over first to find the remaining answer choices; which can lead to potentially misleading results. Third, there are many factors that determine whether students prefer to learn for mastery or for performance, but, it is obvious that question corrections have something to do with student preference; this is apparently the case even if it appears the students
just shove the papers in their backpack and forget about them. Finally, when given the opportunity to express what forms of feedback they think are the most helpful to them, students responded resoundingly. The students in this survey overwhelming reported that they think that it is homework assignments and the corrections, comments, and grades marked on them are the most helpful form of feedback they receive; the most helpful it should be added, for both mastery and performance oriented students.

What was not found out however was a conclusive answer to question, “What is the least useful form of feedback students receive?” After the large numbers for the main forms of feedback students preferred, homework assignments, notes, and quizzes, the rest of the numbers dropped off drastically and roughly equivalently. Therefore, a clear distinction could not be made about what was the least useful form of feedback and it should be planned in future surveys to explicitly ask students which is their least preferred form of feedback.

It is to be noted and kept in mind, however, that the conclusions reached in the paper are based off the analysis conducted by the researcher about the data collected at the survey site. The generalizability of these findings depend greatly on the learning environment present in the school, the learning tools and aids used in the classrooms, and the goals and values of the teachers, students and staff.

The goal of this paper is that its findings will be taken into account when planning for large scale assessments of students’ opinions about feedback and what they find useful. It is also the hope that someday a procedure or tools will be produced that can accurately identify an individual students needs and provide a plan for the teacher on how to tailor all feedback accordingly.
References


Appendix

Student Survey Form

Appendix 1

Class group ______

Student Survey Form

Age:_____

Please circle one: I am Male / Female

Please circle those that apply:

I identity myself primarily as: (White/Caucasian) (Hispanic) (Black/African American)

(Native American) (Asian/Pacific Islander)

While answering the following questions, please keep the following in mind:

1. These questions are about your history class.

2. When a question refers to a score, it means a numeric grade, such as a 95.

3. When a question refers to corrections, it means that the right answer choice has been indicated and/or marks have been made to indicate where an error was made

4. When a question refers to comments, it means the hand written notes that are usually at the beginning, end, or in the margins of an assignment.

For the following questions, please choose the answer choice that most accurately reflects you.

<table>
<thead>
<tr>
<th>My history quiz scores are helpful to me in determining how much I know about the topic covered by the quiz.</th>
<th>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The corrections on my history quizzes are useful to me when studying for a test that covers that material.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>My history homework scores are helpful to</td>
<td>(a) strongly disagree (b) disagree</td>
</tr>
<tr>
<td><strong>me when determining how much I know about the topic covered by the homework.</strong></td>
<td>(c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The corrections on my history homework help me to better understand why I missed the questions I did on the homework.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>My history test scores are helpful to me when determining how much I know about the topic(s) covered by the test.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>The corrections on my history tests help me to better understand the material covered on the test.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>My essay scores in history are helpful to me in determining how much I know about the topic covered by the essay.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>The comments on my history essays help me to better understanding of the material covered by the essay.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>My history report card grade is usually a good indicator of how well I understood the material for that six-week period.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>Getting a low score on a history assignment or test usually motivates me to do better on the next assignment or test.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>Getting a high grade on a history assignment or test usually motivates me to continue to get high grades on the next assignment or test.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>Encouraging comments on a history assignment or test usually help me to do better on the next assignment or test.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
<tr>
<td>Detailed comments on a history assignment or test that help me see where I need improvement usually help me to do better on the next assignment or test.</td>
<td>(a) strongly disagree (b) disagree (c) neither agree or disagree (d) agree (e) strongly agree</td>
</tr>
</tbody>
</table>

1. When working on a history assignment that is particularly difficult, is it more important to you to get an A on the assignment or to ensure that you fully understand the material?

Why?
2. You have just received a 73 on a test that you studied really hard for. Your best friend received an 85. Are you more upset because your friend scoring higher than you or because you felt that you knew the material better than a 73 reflects? Why?

3. When you get an assignment back, what information is the most useful to you and how is it useful? (examples: question corrections, written comments, and grade)

4. You are preparing to study for an upcoming history test and you need to decide what material you need to study. What resources from class do you use to help you determine
what information you need to review? (Examples: old tests, homework assignments, quizzes, and essays)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

How do they help you?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. What form(s) of feedback do you find the most useful in helping you doing well in your history class and why? (Examples include: test scores, homework corrections, quiz scores, and essay comments)
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Teacher Survey Form

Appendix 2

Class

group ______

Teacher Survey Form

Age:______

Please circle one: I am Male / Female

Please circle those that apply:

I identity myself primarily as: (White/Caucasian) (Hispanic) (Black/African American)

(Native American) (Asian/Pacific Islander)

While answering the following questions, please keep the following in mind:

1. These questions are about your history class.

2. When a question refers to a score it means a numeric grade, such as a 95.

3. When a question refers to corrections it means that the right answer choice has been indicated and/or marks have been made to indicate where an error was made

4. When a question refers to comments it means the hand written notes that are usually at the beginning, end, or in the margins of an assignment.

Please answer the following questions about your history class as accurately as possible

<table>
<thead>
<tr>
<th>How often do you assign homework?</th>
<th>(a) once every two weeks (b) once a week (c) twice a week (d) other: ____________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you administer quizzes?</td>
<td>(a) once a month (b) once every two weeks (c) once a week (d) other: ____________________________</td>
</tr>
<tr>
<td>How often do you administer</td>
<td>(a) once a month (b) once every two weeks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you assign essays?</td>
<td>(a) once a month (b) once every two weeks (c) once a week (d) other: ____________________</td>
</tr>
<tr>
<td>What types of questions are typically on your quizzes?</td>
<td>(examples: multiple choice, fill-in-the-blank, and essay)</td>
</tr>
<tr>
<td>What types of questions are typically on your tests?</td>
<td>(examples: multiple choice, fill-in-the-blank, and essay)</td>
</tr>
<tr>
<td>How often do you make corrections on quizzes?</td>
<td>(a) never (b) rarely (c) every other quiz (d) every quiz</td>
</tr>
<tr>
<td>How often do you make comments on quizzes?</td>
<td>(a) never (b) rarely (c) every other quiz (d) every quiz</td>
</tr>
<tr>
<td>How often do you make corrections on tests?</td>
<td>(a) never (b) rarely (c) every other test (d) every test</td>
</tr>
<tr>
<td>How often do you make comments on tests?</td>
<td>(a) never (b) rarely (c) every other test (d) every test</td>
</tr>
<tr>
<td>How often do you make correction on essays?</td>
<td>(a) never (b) rarely (c) every other essay (d) every essay</td>
</tr>
<tr>
<td>How often do you make comments on essays?</td>
<td>(a) never (b) rarely (c) every other essay (d) every essay</td>
</tr>
<tr>
<td>Question</td>
<td>Options</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>What types of comments do you usually leave on tests?</td>
<td>(a) encouraging (b) descriptive (c) both (d) other ____________________</td>
</tr>
<tr>
<td>What types of comments do you usually leave on quizzes?</td>
<td>(a) encouraging (b) descriptive (c) both (d) other ____________________</td>
</tr>
<tr>
<td>What types of comments do you usually leave on essays?</td>
<td>(a) encouraging (b) descriptive (c) both (d) other ____________________</td>
</tr>
</tbody>
</table>