PRAISE AND FORMATIVE ASSESSMENT:

THEIR AFFECT AND EFFECT ON ACADEMIC ACHIEVEMENT

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by

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We hereby recommend that the Action Research Paper prepared under our supervision by Thomas R. Shafer entitled Praise and Its Affect and Effect on Academic Achievement be accepted in partial fulfillment of the requirements for the degree of Master of Education.

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Abstract

The use of praise has long been deemed an important part of the educational process. This study continues that research with honors American literature students at a medium-sized high school in the Midwest. These students received empty praise and ineffective verbal and written assessments while writing one literary analysis paper, then received effective verbal and written praise and assessment on a second literary analysis paper. Analysis of the data revealed that effective praise and assessment did have an influence on student achievement and student affect. Though the statistical proof was not necessarily overwhelming, it was solid enough to engender the recommendation that teachers should utilize effective praise and assessment as yet another strategy in the growing arsenal of educational stratagems and methodologies.

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Praise and Formative Assessment: Their Affect and Effect on Academic Achievement

The purpose of this study is to examine the use of praise in a high school classroom. From early age, children are showered with many types of praise. They are commended for good behavior and conduct. They are applauded for their improving intelligence and academic achievement. They are acclaimed for their athletic prowess and success. Oftentimes, they are even rewarded for their efforts with candy, toys, money, or privileges.

However, praise seems to come less frequently with age. In a recent study, tweeners reported fewer instances of praise as compared to their primary years (Alderman, 2004). For tweeners, increasing responsibility comes with seemingly less praise. High school students also reported fewer instances of praise in the classroom (Krapp, 2003). Students claimed that teachers praised infrequently or not at all. Given this, how important is praise in the high school classroom setting? What is its effect on student learning?

Preliminary Review of the Literature

It has been often noted that low-achieving students believe they cannot succeed in school (Brophy, 1998; Pajares, 2003). Conversely, high-achieving students have reported elevated self-efficacy (Bandura, 1997). Though no studies verify it, it stands to reason that average-achieving students would fall somewhere in between. What could account for the differences among these three groups? Certainly, socioeconomic factors have been deemed important (Coleman et al. 1966). Peer groups also have reportedly affected academic achievement (Bankston & Caldas, 1995; Brown, 1990; Ornstein, 1990). Additionally, research on teaching effectiveness has reported a direct relationship between its quality and student learning (Darling-Hammond & Young, 2002). Other school issues and policies also have been known to play significantly on achievement (class size, school leadership, school finances, academic programming).

So where does praise fit into this discussion? For some, the impact of verbal praise in the classroom has been mixed (Elliot, Hufton, and Hildreth, 1999; Pintrich and Schunk, 1996; Stipek, 1998; Theall and Franklin, 1999). However, much of the recent research has supported the earlier findings of Brophy (1981): that effective verbal praise clearly specifies the behavior being reinforced; is believable to the recipient; is dependent on the behavior being reinforced; and is delivered soon after the observed behavior. Other studies have discovered that teachers should somewhat limit their praise to be effective. Eggen and Kauchak (1999) noted the following: that teachers should praise students when they display self-and time-management skills; that teachers should praise accomplishment rather than participation; and, that teachers should praise meaningfully, even if it means withholding praise because an educational task seems too easy or the praise is just undeserved. Other researchers are more adamant about the significance of effective praise in the classroom, essentially stating that praise is not only important for self-esteem, but for achievement as well (Koestner et al., 1987, 1989; Schunk, 1994). In fact, educational tutors have believed that giving praise is a necessity for academic achievement (Mueller and Dweck, 1998).

Conversely, negative outcomes for students have also been linked to verbal praise. Emmer (1998) discovered that fulsome praise given after every answer was ineffective as an attribution strategy. Burden (1995) determined that if every student response was praised, the praise sounded artificial and the natural flow of the lesson was disrupted. Misdirected praise can even be harmful. Following praise of an easy task, students inferred that the teacher believed their ability levels to be low (Meyer, 1982; Meyer et al., 1979; Blickle, 1991, 1992). Weinstein (1976) additionally revealed that undeserving praise (though well-intentioned) was dispensed to low achieving students. Other research has suggested that teachers who utilize verbal praise as

their sole management strategy have many more behavior problems than teachers who use multiple strategies.

Clearly, there are some significant discrepancies about the use of praise. Where some studies have suggested that effective praise can be a powerful ally, other studies diminish it as an educational strategy. Some even counter that praise can be harmful. Though the literature is mixed on the merit of praise, best evidence suggests that utilized appropriately, it can have a positive affect in the high school classroom.

Specific Research Questions

1. Is there a direct (or other) relationship between effective praise and academic achievement?
2. Will increased, meaningful praise have a positive effect on student learning as measured by improved grades?
3. How is student self-efficacy affected by praise (or lack of it)?

Significance of the Proposed Research

These are given hypotheses for this research study:

1. Praise plays some direct or indirect role on academic achievement.
2. Praise will have a positive effect on student self-efficacy.

This comparative six week study will explore the use of empty praise verses formative assessment on written assignments. For three weeks, two Honors American Voices classes will receive empty praise responses, both verbally and written, on given essays. Phrases like “good work” and “nice job” will be used to assess the essays. For the last three weeks, effectual formative assessment responses will be utilized. Phrases like “this is very effective usage of supporting details” and “you really nailed this explanation about the author’s intended theme”

will be utilized for these essays. After the six weeks, the teacher will continue this more successful form of assessment.

Ultimately, this research explores the nature of the relationship between praise and academic achievement. The literature is quite mixed about this relationship because of the complexity of issues guarding academic achievement. Previous studies have demonstrated that praise DOES have a relationship with academic achievement. This research will compliment previous studies by reinforcing the importance of effective praise in the classroom.

Additionally, this research will explore the impact of praise on student self-efficacy. Students who receive effective praise will experience increased self confidence which should, in turn, positively influence student learning. Students who receive praise will cultivate it and grow into better students.

Lastly, effective praise can be a useful tool for classroom teachers. High school-aged students can be vulnerable and fragile learners. The use of praise in the hands of a knowledgeable teacher can reduce the vulnerability of high school learners and prepare them for their futures. Tangentially, the effective use of praise can be a supplementary classroom management strategy.

Summary

Children receive praise throughout their young lives. In the hands of an experienced and astute practitioner, praise can be an effective instrument. However, in the wrong hands, it can be destructive and damaging weapon. Educational literature debates the merit of praise in the classroom, recognizing the complexity of the significance of praise on student learning and academic achievement. This study will examine the issue by exploring these questions: is there a direct relationship between praise and academic achievement; does praise have an effect on

student learning; and, how is student efficacy affected by praise. This research will investigate these questions and proffer a contribution to the growing debate about praise.

Review of the Literature

The study of praise and its affect on academic achievement has had a long history. Late in the nineteenth century, Binet and Vaschide (1897) measured the effect of verbal praise on elementary-aged children and reported improvement for each child. In a large test-retest study, Hurlock (1924) considered the effect of verbal praise on 408 third, fifth, and eighth graders, and ultimately concluded that the combination of praise and practice resulted in greater improvement than did practice alone. Another Hurlock study (1925) verified her earlier work. In this study, she revealed that accuracy on the Countis Research Test in Arithmetic improved with praise (when compared to a control group). Cohen (1927) replicated and validated the Hurlock study of 1925.

In the 1930s and ‘40s, the effectiveness of praise as a classroom teaching strategy came under heavy scrutiny. Warden and Cohen (1931) concluded that verbal praise had little effect as an incentive, and added that any change in classroom routine worked as a motivation. Chase (1932) reported that any verbal cue, whether it be positive or negative, was more effective than none. In a review of literature, Brenner (1934) stated that few if any conclusions could be made about the effectiveness of praise. In fact, his own investigation on praise (1934) found it to be insignificant as a teaching strategy. Forlano and Axelrod (1937) acknowledged that blame was more effective than praise. At this time, focus on praise and achievement turned more toward the psychological make-up of students. Thompson and Hunnicutt (1944) placed students in one of two categories, extrovert or introvert. After three trials, they concluded that verbal praise and blame were effective at motivating all students (verses the control group). Interestingly, they

found that introverts performed better when praised, while extroverts preformed better when blamed. They even opined that praise and blame should be used to fit individual cases.

In the 1950s and ‘60s, praise and achievement efforts concentrated on homogenous grouping studies. Terrell and Kennedy (1957) asserted in their “candy-reward” study that while the praise group was no more effective than the control group in a task-oriented experiment, the candy-reward group learned the given tasks at a much quicker rate. Kent (1957), in a study that investigated motivational differences between sighted and blind children, concluded that praise was an effective motivator for both groups. Dollins, Angelino, and Mech (1960) found few statistical differences between praise and control groups in their study of seventy-five elementary-aged children who had scored below the thirtieth percentile on the CTP (California Test of Personality), but did conclude that through the employment of verbal praise, teachers could have beneficial effects on the their students In a study on the effect of praise and stress on creativity, Metz (1961-62) stated that praise enhanced the creative performance of all individuals. In a study that investigated praise as a function of intelligence, Kennedy, Turner, and Lindner (1962) examined two adolescent groups, one with IQs ranging from 124 to 150, the other ranging from 95 to 116, and found praise to have little or no effect on either group. Finally, Anderson, White, and Wash (1966) reported that praise had a generalized positive effect on performance for first-year university female students.

After almost seventy years of study on praise in the classroom, few conclusions were evident. Each study extolling praise was countered with one denouncing it. Replicated studies, with few exceptions, could not replicate evidence for the affirmation of praise. Though common sense suggested that praise must have some affect on student achievement, no direct empirical evidence existed. However, that long history of research would be more important than ever as

education entered a period of significant change, especially with regard to the students of the late sixties and early seventies.

With evolving technological advances looming on the horizon, America was slowly changing into a white collar workforce. Robotics was altering forever the framework of factory-fabricated commodities. Mass communication was transforming from physical (or print) forms (mail, newspapers, and magazines) into electronic forms (via television, telephone, and ultimately the computer). The business world was now demanding a better educated worker. Consequently, education commanded more attention than ever. With blue collar job numbers fading, college applications soared, and educational leadership across America scrambled to produce competent high school graduates capable of confronting this changing world. In an effort to maximize potential of the products of American school systems, educational researchers turned their collective attentions to the mechanics of teaching, thus concluding that the unveiling of best practices would indeed lead to better end products. To that end, some of this research turned back to the area of praise and its affect on student achievement.

Much of the research of the last forty years has taken a different tact concerning the study of praise. Some researchers have tended to examine the affects of praise on differing achievement levels (typically high- or low-achievers). Others have focused on the area of self-efficacy. These studies have concluded that praise, like many teaching strategies, cannot be singled out or isolated, that many other factors must be considered concurrently.

Socioeconomic factors have played a significant role in the praise-achievement discussion. Kennedy and Willcut (1964) concluded that while praise somewhat increased performance for all students in a discrimination task, it significantly increased performance for children coming from lower socioeconomic backgrounds. Other studies (Brophy & Evertson,

1976; Cantrell, Stenner, & Katzenmeyer, 1977; Good, Ebmeier, & Beckerman, 1978) found that praise correlated positively with achievement in low-SES students, but had little effect on high-SES students. Though socioeconomic factors are known to be important to the praise dialogue, few recent studies have shed additional light on this area.

Peer groups have also been purported to affect academic achievement. Maag (1999) suggested that one way to help students acquire necessary skills was to have them model other already successful students. Alderman (2004) advanced this thought by relating that the acquisition of skills should be reinforced with praise from those already successful students. Schunk (2003) observed that copying models would be particularly effective for students suffering from low self-efficacy. And, Zimmerman (2000) noted that struggling learners often realized that they *could* achieve after watching coping models overcome their own mistakes. Other studies (Bankston & Caldas, 1997; Ornstein, 1990) have supported and advanced these peer group findings.

The use of praise itself (and frequency of it) has been an important consideration of the praise issue. For some researchers, the impact of praise as a strategy was deemed minimal (Elliot, Hufton, & Hildreth, 1999; Pintrich & Schunk, 1996; Stipek, 1998). Additionally, some research has indicated that praise was utilized infrequently in the classroom. Dunkin and Biddle (1974) contended that teachers used praise no more than six percent of average classroom time. Brophy (1981) countered that even those numbers were skewed because included in them were observations approximating jokes, statements like “go on,” and head nodding. In a more recent study, middle school-aged children reported fewer instances of praise when compared to their elementary years (Alderman, 2004). And, according to Krapp (2003), high school students have also reported fewer instances of praise in academic settings. Given the progressive modifications

to adolescent psychology and pedagogy, and in particular self-esteem and self-efficacy issues, praise numbers in the classroom should have significantly increased, but apparently they have not.

Research has also linked verbal praise to negative student outcomes. Deci and Ryan (1980) argued that praise could reduce motivation, and perhaps even subsequent effort. Baumeister, Hutton, and Cairns (1990) concluded that an effective way to disrupt skilled performance was to compliment the performer of that skill beforehand. Emmer (1998) deemed that fulsome praise given after answers, even incorrect ones, was an ineffective teaching strategy. Pfiffner, Rosen, and O'Leary (1985) found that misbehaving students continued their misbehavior if verbal praise was the only classroom management strategy. Burden (1995) noted that praising every student response interrupted the natural flow of lessons, and subsequently diminished the effectiveness of the praise. Fulsome *and* genuine praise of easy tasks completed by low-achieving students actually caused those students to infer that their teachers believed their ability levels to be low (Meyer, 1982; Meyer et al., 1979). Abramowitz, O'Leary, and Rosen (1987) even suggested that praise alone cannot increase academic productivity.

However, other researchers have validated the importance of effective and directed praise. Brophy (1981) posited that not only was praise free, it was desirable over other potential methodologies (like rewarding money) because it provided students with encouragement while reinforcing self-esteem and strengthening student-teacher relationships. Rathvon (1990) suggested that teacher-delivered encouragement can have positive effects on the behavior and achievement (though minimally) of elementary-aged students. Kast and Conner (1985) demonstrated that informational verbal feedback enhanced intrinsic motivation with middle school-aged children. Mueller and Dweck (1998) pointed out that educational tutors have long

noted the importance of bestowing praise, that it may even be necessary for academic achievement. Hancock (2002) revealed that properly utilized verbal praise can influence students to engage in positive behaviors associated with learning (i.e. extended time on study and homework). Schunk and Zimmerman (1997) conjectured that when teachers focus feedback and praise on what struggling learners have done well and on what they might do for improvement, they give those learners a map for success. Furthermore, Margolis and McCabe (2006) pointed out that task-specific feedback and praise can direct struggling learners' attentions to critical factors responsible for success. Dollinger and Thelan (1978) even proclaimed that positive feedback for elementary-aged students enhanced intrinsic motivation more than rewards like food, gold stars, or ribbons. Perhaps because (as Brophy professed) praise is free -- and easy -- to dispense, most of the recent research has found at minimum some validation for the usage of it.

Research validating praise as an effective teaching strategy has resolved that any praise must be specific and genuine. This was noted as far back as 1960 when Dollins, Angelino, and Mech (1960) declared that teachers can help students with systematic and positive praise. Salend (2001) contended that praise should be utilized to encourage independence, determination, and creativity. Thompson (1997) stated that praise needed to be focused on specific actions rather than broad skills or competencies. MacLellan (2005) reported that process praise (praise directed at student effort or strategy) was a much more effective teaching strategy than person praise (praise directed at students more globally). In his landmark study on praise, Brophy (1981) detailed four important tenets of effective verbal praise: it must clearly reinforce the witnessed specific behavior; it must be believable by the recipient; it must be dependent upon the behavior being reinforced; and, it must be delivered soon after the observed behavior. A

subsequent Brophy study (Good & Brophy, 2003) added two more staples: that the praise specified accomplishments *and* suggested competence. Other studies have pointed to limits on effective praise. Eggen and Kauchak (1999) revealed three limiting principles: students should be praised for displaying self- and time-management skills; students should be praised for accomplishment, not just participation; and, students should always receive meaningful praise (and even have it withheld for easy educational tasks). Finally, Berglas (1990) suggested the use of directive praise rather than evaluative praise because directive praise actually looks forward to future performances and even imposes pressure to repeat past performances. One common thread has been revealed through these more contemporary studies on praise: that any given praise should have some order of specificity and directedness.

Researchers have also assessed the area of self-efficacy as it relates to the praise-achievement debate, principally in the differences between low-achieving and high-achieving students. Schunk (1982) concluded that students' perception of their own capabilities can have important effects on their achievement. As has often been noted, low-achieving students believe that they cannot succeed in school (Pajares, 2003; Henk & Melnick, 1995; Walker, 2003). They are also rendered particularly sensitive to the adverse effects of failure (Thompson, 1997). Students with low academic self-concept also experience greater negative consequences in the form of anxiety, frustration, and humiliation, especially when compared to students who report high academic self-concept (Moorland & Sweeney, 1984). Furthermore, students who recounted their own low self-estimations of ability have tended to experience a self-fulfilling prophecy effect in terms of actual achievement levels (Hansford & Hattie, 1982). By contrast, high-achieving students have reported elevated levels of self-efficacy (Bandura, 1997). They are also little affected by setbacks and failures, and in some circumstances even rise above their failures

to perform at superior levels (Baumeister & Tice, 1985). And, according to Bandura (1997), these high-achievers are inclined to set higher goals and be more persistent while taking on exigent tasks. These common sense observations regarding low- and high-achievers have changed very little over the many years of research in this area.

Given the evidence related to low- and high-achieving students, improving student self-efficacy would present itself as a valid teaching strategy. According to Bandura's theory of self-efficacy (1977), differing strategies could change behavior and ability to some extent by reinforcing or strengthening perceived self-efficacy. Thus, one strategy presented for strengthening self-efficacy would certainly be praise. Pressley et al. (2003) conjectured that the key to engaging and motivating struggling learners was to convince them that they could indeed succeed and learn. And, Wigfield and Harold (1992) revealed that student self-concept and success expectations became more pragmatic and receptive to teacher feedback as students matured. MacLellan (2005) argued that academic setbacks, stress, and study pressures should not be viewed as pathological symptoms from which students must be shielded, but as focal points for subsequent academic improvement and achievement. MacClellan further posited that specific and systemic praise would be beneficial to this end. Salend (2001) suggested that using corrective feedback and praise could demonstrate to struggling learners how to correct their mistakes, thus bolstering self-efficacy. Margolis and McCabe (2006) determined that by focusing on self-efficacy, teachers could help learners develop optimistic, can-do attitudes and replace their destructive patterns of poor self-efficacy perceptions. All of this evidence suggests that strengthening student self-efficacy through praise can ameliorate a variety of educational difficulties.

Summary

Clearly, some significant disagreements concerning praise exist in the educational universe. However, a majority of the studies have professed that *all* students are affected by praise, whether that praise was deemed damaging, ineffective, or effective. And, it might be important to note here that given a preponderance of evidence, no two students have responded (or will respond) the same to given verbal or written praise. So, because the most significant and beneficial studies have indicated that praise can be an effective educational strategy when utilized appropriately, teachers should use it. But, most concur that the key to effective praise is specificity, relevance, and sincerity.

Method and Design

Subjects of the Study

The participants in this repeated measures study were thirty-four juniors from a medium-sized suburban high school in the Midwest. Participants were constituents of two separate honors' American literature classes. Twenty-four of the thirty students were females, and all thirty-four were in the top fifteen percent of their graduating class. One of the two classes occurred during the fourth period of the school day (before lunch), the other during the seventh and last hour of the day. These students were selected because they are high achieving and competitive with regard to grading and would likely be affected by verbal and written praise in the classroom. Because the intervention was conducted as part of typical classroom instruction, parental consent was not necessary.

Method and Design

Measures. Data were gathered from six sources: raw scores from the two written essays, student self-observations from two identical thirteen statement Likert surveys, and teacher observations from two sets of student-teacher conferences. Raw scores (in percentages) from the

two essays were compared and analyzed through the use of a two-tailed paired T-test. The results of the Likert surveys were similarly compared and analyzed with a two-tailed paired T-test. Given initial results that indicated significant statistical differences between pre- and post-Likert surveys, three separate ANOVAs were performed: a comparison of all Likert statements; a comparison of statements advocating verbal feedback; and, a comparison of statements advocating written feedback. Observations from the student-teacher conferences were recorded and tabulated for further discussion. The instructor monitored a number of verbal non-verbal clues, including body positions, facial expressions, eye contact, and questioning by students.

Process. During this six-week study, students wrote two five-paragraph essays, a literary analysis of a favorite song and a literary analysis of a poem (see Appendix A for time-line). Much instructional time was spent verbally analyzing both song lyrics and poems. Song lyrics and poems were read aloud, and students closely examined these works line-by-line, exploring the analysis components found within them. Students also worked collaboratively on teacher-selected lyrics and poems, and eventually reported findings from small group to large group. Then, students were instructed to individually generate a single body paragraph from their own selected song lyrics, which would be followed by a student – teacher conference. For the first part of this study, students received empty praise responses from the instructor. During conferencing and in written evaluations, the teacher utilized phrases like “This is fine,” “This is satisfactory,” “This is adequate,” “This needs work,” “Your paragraphs are long enough,” “You have topic sentences,” and “Decent job.” Students then completed full rough drafts. After rough drafts of the song analyses were submitted and evaluated, students again conferenced with the teacher. Conferencing merely reiterated the earlier-employed “empty” written responses. Finally, students completed their final copies, which were similarly scored and praised. They

then completed a Likert survey (see Appendix B) that articulated thoughts and feelings about assessments, praise, and their own writing abilities. The statements presented in this Likert investigated preferences relating to feedback, and more specifically, whether students preferred verbal or written feedback.

With the last three weeks of the study, students received effective formative and summative assessments on the poetry analysis assignment. The teacher used phrases like "Excellent examples in your theme paragraph," "Your symbolism paragraph addresses the water images effectively by pointing out the religious ties to Baptism," "This paragraph needs more textual examples and additional discussion about the writer's style," and "Your writing conveys deep thought and insight." These formative and summative assessments were applied both in the written evaluations and during conferencing with the instructor. After the completion of the poetry analysis paper, students once again assessed their abilities with the Likert survey.

Summary

This chapter describes the participants, measures, and methodology for this study. Thirty-four high school juniors were treated with empty praise in the first part of the study, and with formative assessments and feedback in the second half of the study. Data analysis compared student responses from each treatment to determine whether formative feedback or praise were preferred by students.

Findings and Conclusions

Introduction

The purpose of this study was to compare praise and formative feedback, and also explore the relationship between praise and academic achievement. These research questions powered the study:

1. Is there a direct (or other) relationship between effective praise and academic achievement?
2. Will increased, meaningful praise have a positive effect on student learning as measured by improved grades?
3. How is student self-efficacy affected by praise (or lack of it)?

This chapter scrutinizes the data, clarifies the analysis, and defends the study's assertion about praise. Limitations of the study are also discussed, and recommendations for further exploration are proposed.

For this study, Microsoft Excel was employed for data collection and organization, and for the calculation of sums and averages. Excel was also utilized to compute T-tests and ANOVAs.

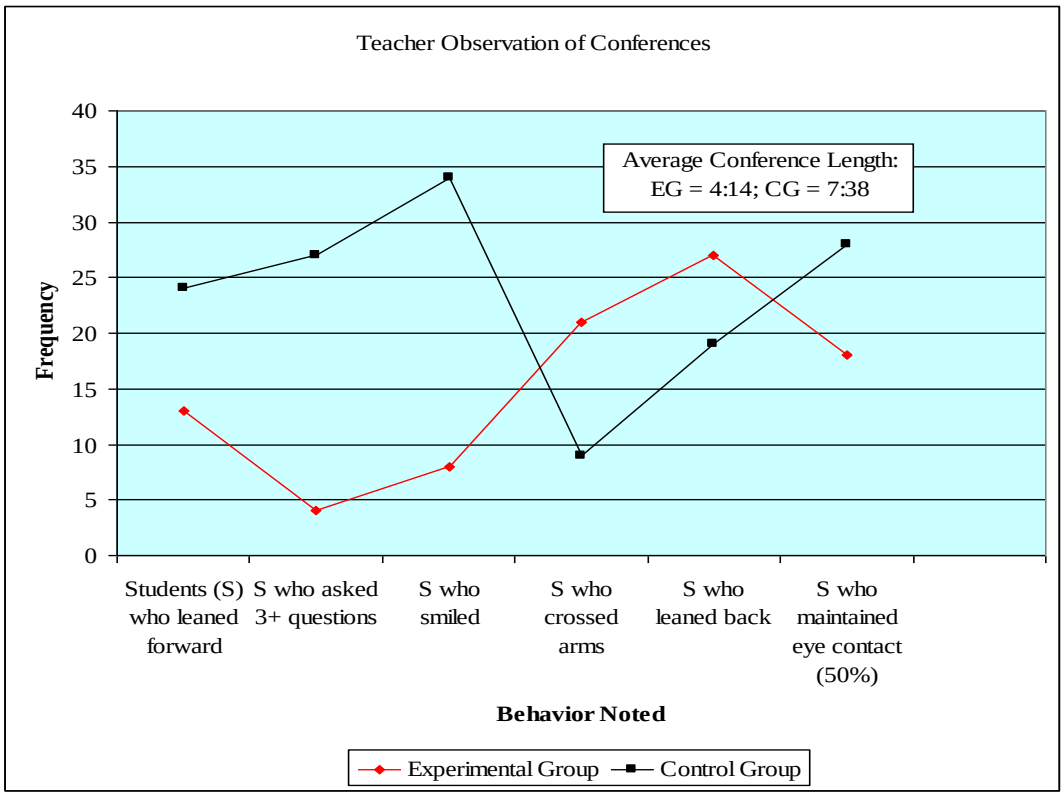
Findings

Thirty-four juniors from West Carrollton High School in West Carrollton, Ohio, were participants of this study. All were honors' students (3.0 grade point average or better), and all were positioned in the top fifteen percent of the class of 2008. Twenty-four of the constituents were female (71%); ten were male (29%). All thirty-four were involuntary subjects of the study and were not made aware of it until its completion. The first information collected for this study came in the form of observations made while conferencing. Though this evidence could not be computed or analyzed scientifically, it was nonetheless compelling (see Table 1). For the first three weeks, the teacher used empty praise statements and comments. During conferences after

completion of the rough draft of the song analysis essay, the researcher documented the following nonverbal and verbal cues: leaning forward, leaning back, smiling, crossing arms, maintaining eye contact (at least 50% of the length of the meeting), and asking three or more questions. He also tallied the time for each conference. During the last three weeks of the study (when the teacher was utilizing more effective formative assessment), this format was repeated for the poetry analysis essay.

The data collected during these conferences suggested that effective formative

Figure 1



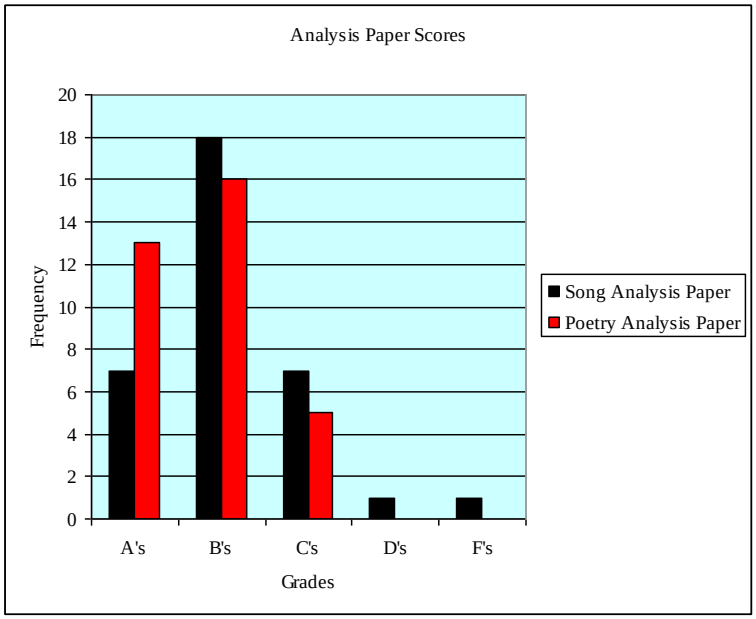
assessment and praise do positively influence a student's affect and performance (which will be addressed with paper scores later). While mood and disposition could not be quantified statistically, observations suggested that students responded far more favorably to the poetry analysis conferences. Students seemed more positive, interested, and engaged. Significantly

more students asked questions during the second conference (27 to 4), and all thirty-four eventually smiled at some point (versus 8 in the previous meeting). More students leaned forward (24 to 13) in the second meeting, and more maintained sustained eye contact (28 to 18). During the first meeting, more students leaned back (27 to 19) and crossed arms (21 to 9). These behaviors might indicate disinterest and disengagement. Additionally, the average length of conferences rose from 4:14 to 7:38 between the two meetings, suggesting that students found more enrichment and assurance during the second meetings.

Many variables could challenge the viability of these statistics. Certainly, student and teacher moods prior to the conferences could not be taken into account. Students may have asked more questions during the second meeting because they better understood the assignment (having already written one literary analysis essay). Also, students knew the teacher better at the time of the second conference, and may have felt more comfortable with him, enough so to ask supplementary questions. Knowing the teacher better may also have explained the increased maintenance of eye contact during the second conferences. With regard to body positions, some students might be more comfortable leaning forward or back, so these signs might not be indicative of interest level or engagement. The additional time for the second conferences might correspond with increased comfort level with the instructor or the need to ask more questions because of the additional difficulty of the assignment. Traditionally, adolescents have found analyzing a favorite song more straightforward and uncomplicated than analyzing poetry. Lastly, the maintenance of eye contact during conferencing might be difficult for some students as a result of multiple issues beyond the control of this study. Though these variables cannot be completely refuted, the data did advocate that the formative assessment and praise of the second conference did affect the students in the study.

A comparison of the essay scores also supplied some compelling data for analysis. The average percentage between the papers rose from 81. 6 % on the song analysis essay to 87.4 % on the poetry analysis essay (see Appendix C). Twenty-nine students earned grades of A or B on the more difficult second essay; twenty-five earned those same grades on the first (see Table 2). Even more notably, thirteen students garnered A's on the poetry analysis essay while only seven garnered A's on the song analysis essay, resulting in an 86% improvement. Additionally, on the second essay, fewer students received C's, and none received D's or F's. A paired t-test was

Figure 2



utilized on these statistics to investigate the relationship between these two sets of scores (see Appendix D). After performing the two-tailed paired t-test, a statistically significant difference was found to exist (at the .05 level) between the two sets of scores, thus suggesting that the use of formative assessment did have a positive effect on the scores of the essays.

Some precursors could contest this confirmation. The students did complete two similar writing assignments, and certainly the second effort would emerge more effortlessly. Also, being honors' students, they would absorb the nuances of the analysis style more easily.

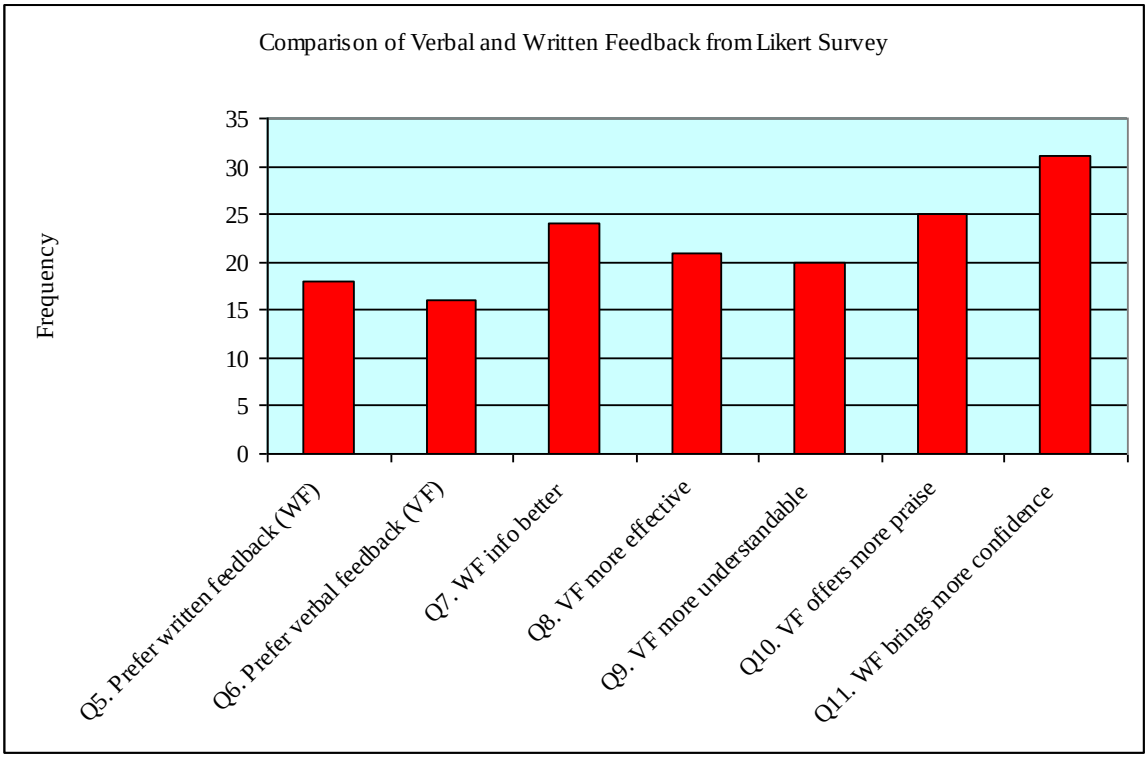
Additionally, students were more familiar with the teacher's grading style at the time of the second essay, and perhaps had adjusted their writings accordingly.

Statistically, one outlier in the data did appear problematic. One student did not complete the first essay and was assigned a zero percent for the assignment. So, a second two-tailed t-test was executed, this one eliminating the student's zero score (see Appendix D.1). This trial also produced a statistically significant outcome (at the .05 level), so the result of the prior t-test was validated. Because of the additional difficulty of the second essay and given the influential evidence of the two t-tests, it could be concluded that the formative assessment and subsequent praise did provide a beneficial enhancement to their grades and achievement.

The last information gathered for this study was harvested from two Likert surveys (see Appendix B), both administered at the completion of the two papers. The first Likert (called Pre-Likert for this study), given after the completion of the song analysis essay, revealed many interesting findings (see Appendix E). Though eighty-two percent of the students admitted that they did not enjoy writing papers (28 of 34), eighty-eight percent derived a sense of accomplishment when their papers were completed (30 of 34). Twenty-six percent (9 of 34) of the students reported receiving verbal praise about their writing from teachers, and another thirty-two percent (11of 34) reported receiving written praise. Even more interesting, though, eighty-five percent (29 of 34) revealed that praise does affect their writing. So, though a large percentage of students recalled few instances of teacher verbal or written praise, that praise (or lack of it) did have a profound influence on student writing. Ninety-seven percent (33 of 34) of the students also conveyed that conferences were helpful to their writing.

The results concerning preferences between verbal and written feedback were quite mixed (see Table 3). Fifty-three percent (18 of 34) of the students favored written feedback

Figure 3



while forty-seven percent (16 of 34) favored verbal feedback. Seventy-one percent (24 of 34) felt that written assessment imparted better and more edifying information about their writing, while sixty-two percent (21 of 34) found verbal assessment more effective. Another seventy-four percent (25 of 34) believed that verbal assessment provided more praise than written assessment; ninety-one percent (31 of 34) deemed that written assessment bestowed more confidence. These mixed results truly pointed at two conclusions: that both verbal and written assessments are helpful, even inspirational, to students, and that students crave praise and effective assessment of any sort.

The Post-Likert, given after the completion of the poetry analysis essay, also presented many interesting results (see Appendix E.1). Forty-one percent (14 of 34) of the students now acknowledged that they enjoyed writing papers, up from the twenty-eight percent reported after the first essay. Now, one hundred percent admitted that completion of papers produced a sense

of accomplishment (just eighty-eight percent had reported this earlier). Sixty-eight percent (23 of 34) now stated that they had been verbally praised (a whopping 156% increase!) and seventy-one percent (24 of 34) now maintained that they had received written praise (a 118% increase). Additionally, one hundred percent of students affirmed that praise affected their writing and that conferencing assisted it. This data indicated that the effective assessment and praise in the second part of the study did impact how students felt about their writing.

The verbal/written feedback results were just as mixed in the Post-Likert survey. Fifty-three percent (18 of 34) of the students still preferred written feedback and assessment while forty-four percent (15 of 34) favored verbal. Eighty-three percent (28 of 34) now found written feedback more effective, while sixty-two percent (21 of 34) still considered verbal feedback more effective. One hundred percent of the students agreed that written assessment provided more confidence; however, only fifty-six percent (19 of 34) now believed that verbal assessment afforded more praise (a 24% decease from the first Likert). Again, as suggested before, students find value in verbal and written assessment and desire any type of effective praise.

A two-tailed t-test analysis was again utilized to examine the relationship between the Pre- and Post-Likerts (see Appendix E.2). The t-test of these surveys (assuming a significance level of .05) intimated that a statistically significant difference existed between the results of the two Likerts. This supported the earlier findings that the assessments and praise during the writing of the second paper did affect and inspire the students of the study.

To better analyze the more intricate details of the two Likert surveys, analysis of variance (ANOVA) was employed. An overall AVOVA was computed on the two surveys (see Appendix F). Assuming a significance level of .05, this finding was also statistically significant. This again implied that formative assessment did affect student self-perception about writing.

As a result of this finding, two additional ANOVAs were executed on this data to better ferret out deeper understandings. One was performed for students who preferred written feedback (see Appendix F.1), and the other was completed for students who preferred verbal feedback (see Appendix F.2). For the "written feedback" ANOVA, no difference was observed (at the .05 level) between the surveys for the table rows. However, for the columns, the hypothesis that there was no difference between the two Likert surveys regarding written feedback was accepted. This finding suggested that some of the results of the surveys could be reduced to chance, and thus, they were not deemed significant. For the "verbal feedback" ANOVA, both rows and columns accepted the null. Consequently, there was no evidence of a statistically significant difference between the two groups.

These last two ANOVAs implied that the statements from the Likert survey might be somewhat problematic, which was not surprising. Though the redundancy of these statements created a measure of validation, they also allowed for some contradiction. Students could theoretically respond that they preferred both verbal and written praise alike. Additionally, some of the statements were not as aligned and linear as they should have been ("verbal feedback utilized more effectively that written" does not necessarily equal "written feedback provides more detailed information about my writing"), and this too could have produced these inconsistent results. A better formatted Likert would serve another similar study much more effectively.

Conclusions

These again were the research questions driving this study:

1. Is there a direct (or other) relationship between effective praise and academic achievement?

2. Will increased, meaningful praise have a positive effect on student learning as measured by improved grades?

3. How is student self-efficacy affected by praise (or lack of it)?

With regard to the first two questions, much of the prior research concluded that praise had a much greater affect on students of lesser ability and those coming from lower socioeconomic backgrounds. Brophy and Evertson (1976) even posited that while praise correlated positively with students from these two groups, it had little affect on high achieving students from better socioeconomic backgrounds. Additionally, Kennedy, Turner, and Lindner (1962) found that praise had little to no effect on adolescents with intelligence quotients of 124 to 150. However, because many teachers have challenged the legitimacy of these findings, this study was conceived, designed, and executed. It focused specifically on high achieving students from mostly middle-class backgrounds. And, though it can't be stated conclusively that there is a *direct* relationship between effective praise and academic achievement, this study has presented solid evidence that effective praise does affect academic achievement. Student grades improved markedly on the second of the two writing assignments (a 7% increase), an assignment that is typically more difficult than the first. This evidence alone promoted the belief that teachers should utilize effective praise in an effort to better maximize student potential.

The third question was much harder to quantify, but the Likert surveys did indicate that students were significantly affected by praise or the lack of it. Past research has supported this assertion. MacClellen (2005) conjectured that specific and systematic praise could offset academic setbacks, stress, and study pressures. Deci and Ryan (1980) argued that praise, especially ineffective praise, could diminish student motivation and effort. From the Post-Likert survey in this study, all thirty-four students unanimously agreed that praise affected their writing

and made them more confident about it. Yet, given the alarming evidence that today's students experience less praise (Alderman, 2004; Krapp, 2003), this study has upheld the perception that praise, in all its forms, is indeed important to high school students.

Recommendations

Brophy (1981) contended that because praise was free, it should be a staple teacher methodology. Additionally, he maintained that praise provided encouragement and reinforced self-esteem. This study has merely sustained and championed his affirmation. Teachers should engage in effective assessment and praise because they *are* free, and because many recent studies are tending to support them (Mueller & Dweck, 1998; Hancock, 2002; Salend, 2001; Margolis & McCabe, 2006). Ultimately, Brophy's 1981 landmark study offered these important beliefs (and recommendations) about effective praise: it must reinforce the behavior, it must be believable; it must be dependent upon the behavior; and it must be delivered promptly. Instituted in today's classroom, they would team to become an effective tool and strategy.

Additional studies should be completed in the arenas of praise, feedback, and assessment. Lengthier studies might further strengthen the direct link intimated between praise and academic achievement. A better Likert survey might prove beneficial to teasing out the more subtle nuances of student responses about praise and assessment. Additionally, studies in other curricular areas would bring more validation to this whole field of study.

Summary

This study examined the issue of praise by exploring these questions: is there a direct relationship between praise and academic achievement; does praise have an effect on student learning; and, how is student efficacy affected by praise. Children receive praise throughout their young lives. In the hands of an experienced and astute practitioner, it can be an effective

instrument. However, in the wrong hands, it can be destructive and damaging weapon. Educational literature has long debated the merit of praise in the classroom, and has long recognized the complexity of the significance of praise on student learning and academic achievement. In this study, thirty-four high school juniors were subjected to heavy doses of empty praise and assessment, then later re-subjected to the teacher's more effective formative assessments and praise. Statistical analyses were subsequently utilized to ascertain that praise does indeed influence student affect and academic achievement. As a final recommendation, teachers should utilize effective praise in an effort to better maximize student potential and achievement.

Appendices

Appendix A

Timeline of Class Schedule for Praise Study

Wk.1. ***Monday***: Dispense literary analysis handout (with exemplars). Emphasize the many literary elements.

Tuesday: Analyze the Beatles song "Yesterday" together with students. Hand out Sylvia Plath's poem "Mirror." Students will examine poem and write single paragraph of explanation/analysis.

Wednesday: Discuss the written paragraphs in small groups first, then report out to large group. Submit paragraph, then look at exemplar for "Mirror."

Thursday: Return paragraphs. Both classes will receive written empty praise statements. Assign one paragraph of the song analysis paper (a body paragraph) examining one literary element, and provide time to work in class. Walk around room, empty praising the class.

Friday: Have student peer edit one another's paragraphs. They will be addressing specific items from a given rubric. Paragraphs will then be submitted.

Wk. 2. ***Monday***: Students will meet in the school's computer lab. Paragraphs are returned to students complete with empty praise assessment. Students will continue working on their papers while teacher briefly conferences with each student over the next couple of days. Conferences will reinforce the empty praise assessment.

Tuesday & Wednesday: Work days in the computer lab with continued use of empty praise statements during conferences. Full rough drafts due Thursday.

Thursday: Rough drafts submitted. Poetry work on Paul Lawrence Dunbar.

Friday: More poetry work: E. A. Robinson and Edgar Lee Masters.

Appendix A

Wk. 3. ***Monday & Tuesday***: Rough drafts returned with empty praise assessment. Teacher will conference with each student, again utilizing empty praise statements.

Wednesday & Thursday: Final copies of literary analysis due. Poetry work with more modern poets.

Friday: Final copies returned and discussed. Pass out Likert survey for homework.

Wks 4 – 6. Process is reversed to more traditional formative assessment for the poetry analysis assignment in the two classes. Final Likert survey will be given at the end.

Appendix B

American Voices II. Likert Survey about Writing.

Please address the following statements about writing with utmost honesty. Place the corresponding number in the given space using the following scale:

1 = strongly disagree 2 = disagree 3 = agree 4 = strongly agree

_____ 1. I enjoy writing papers and essays.

_____ 2. I feel a sense of accomplishment when I complete a writing assignment.

_____ 3. Teachers praise (verbally) my writing ability.

_____ 4. Teachers praise (in writing) my writing ability.

_____ 5. Upon completion of a writing assignment, I prefer written feedback.

_____ 6. Upon completion of a writing assignment, I prefer verbal feedback.

_____ 7. Written feedback provides more detailed information about my writing.

_____ 8. I utilize verbal feedback more effectively than written feedback.

_____ 9. Verbal feedback is easier to understand than written feedback.

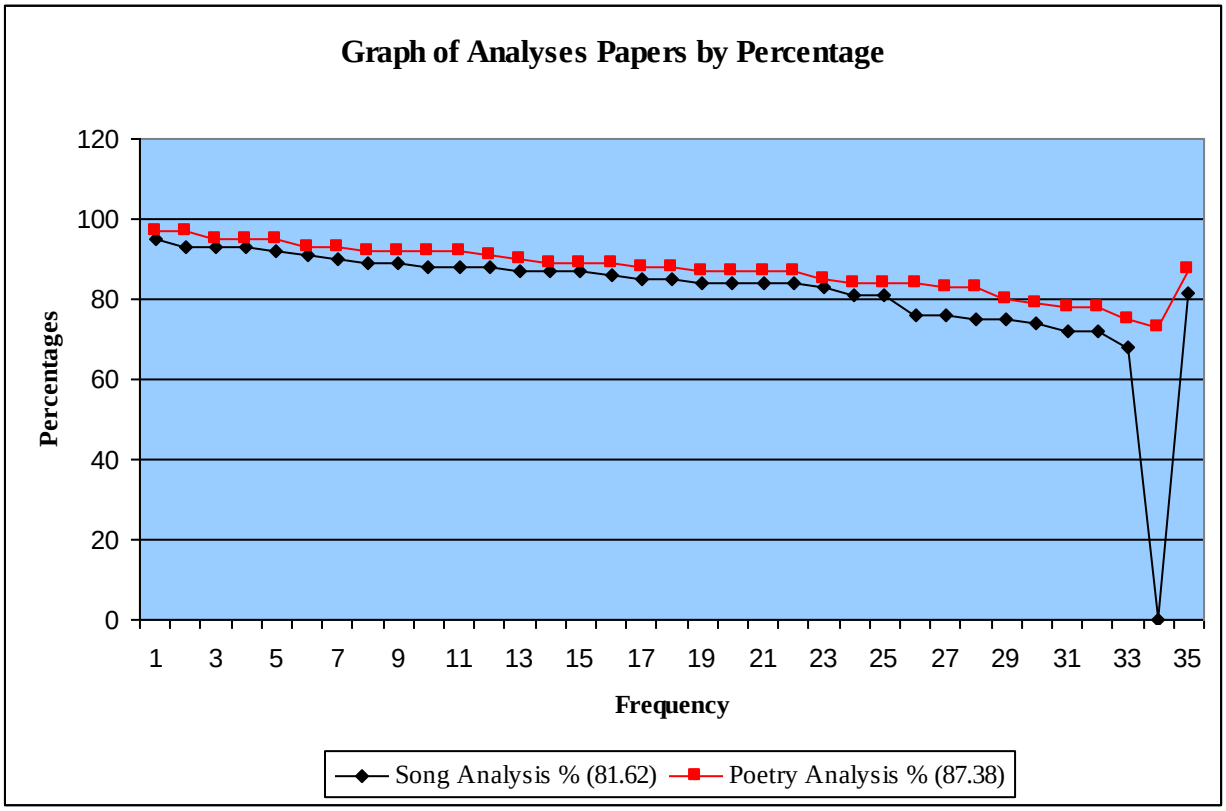
_____10. Verbal feedback provides more praise about my writing.

_____11. Written feedback makes me more confident about my writing.

_____12. Conferencing after a rough draft helps me with my writing.

_____13. Praise (either verbal or written) has an affect on my writing.

Appendix C


Graph of Analyses Papers by Percentage
120
100
80
60
40
20
0
Percentages
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
Frequency
Song Analysis % (81.62)
Poetry Analysis % (87.38)

Appendix D

Two-Tailed T-Test for Analyses Paper Percentages

t-Test: Two Sample Assuming Equal Variances

	Variable 1	*Variable 2*
Mean	81.61765	87.38235
Variance	256.3645	38.66756
Observations	34	34
Pearson Correlation	0.757536	
Hypothesized Mean Difference	0	
df	33	
t Stat	2.796342	
P(T<=t) one-tail	0.004244	
t Critical one-tail	1.69236	
P(T<=t) two-tail	0.008489	
t Critical two-tail	2.043515	

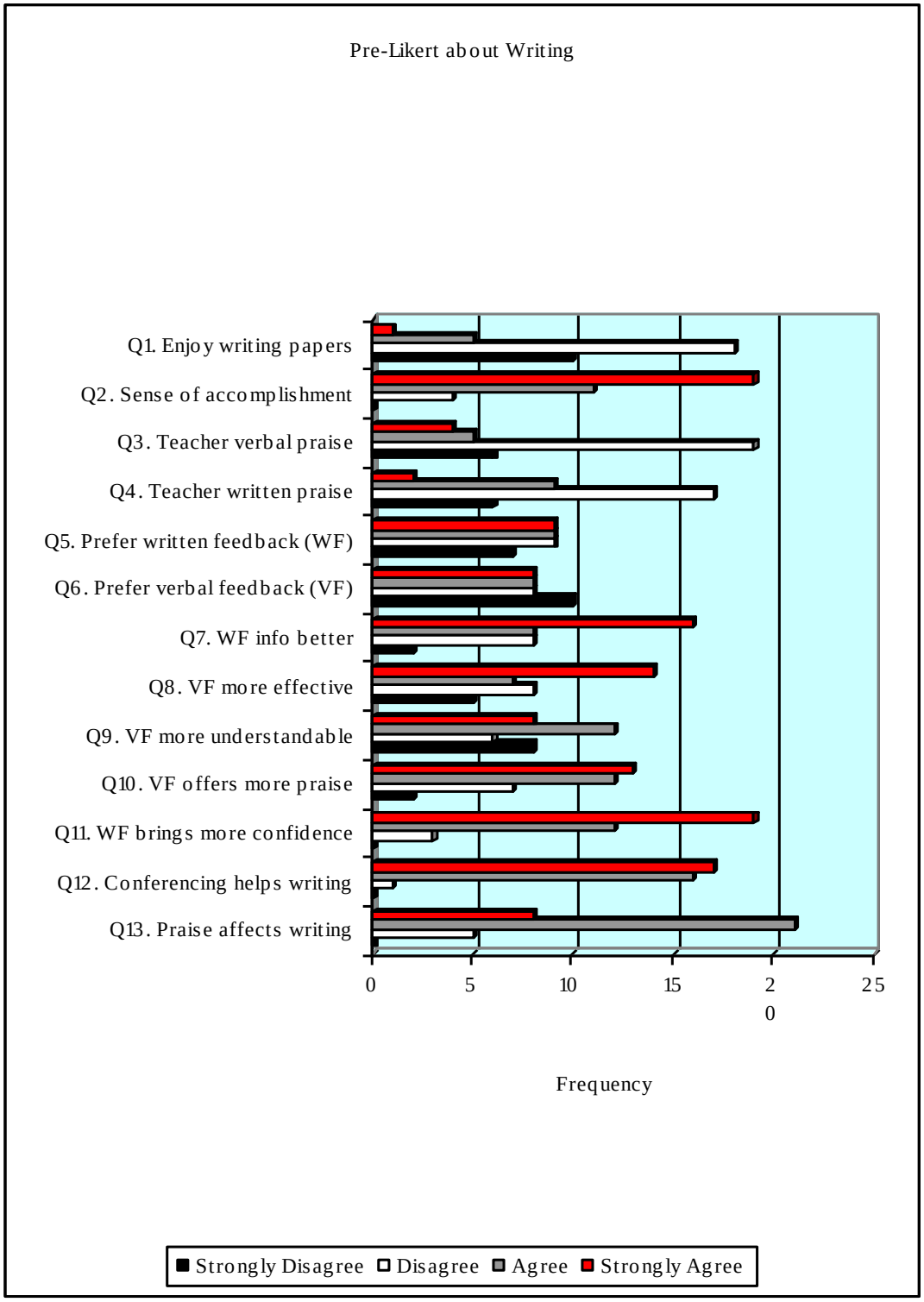
Appendix D.1

Two-Tailed T-Test Assuming Value of 60 Instead of 0

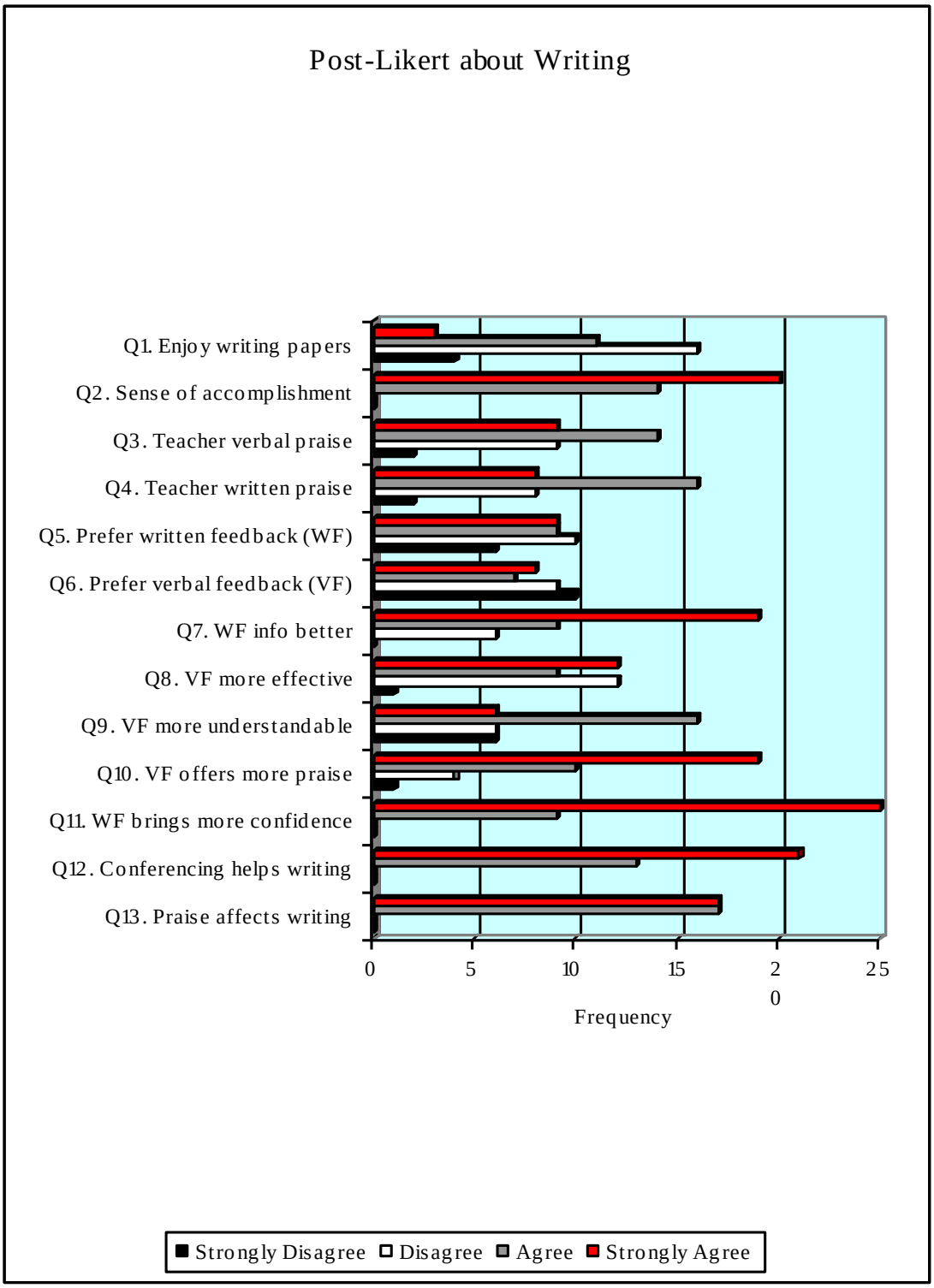
t-Test: Two-Sample Assuming Equal Variances

	Variable 1	*Variable 2*
Mean	83.38235	87.38235
Variance	65.45544	38.66756
Observations	34	34
Pooled Variance	52.0615	
Hypothesized Mean Difference	0	
df	66	
t Stat	2.285736	
P(T<=t) one-tail	0.012744	
t Critical one-tail	1.668271	
P(T<=t) two-tail	0.025488	
t Critical two-tail	1.996564	

Appendix E


Pre-Likert about Writing
Q1. Enjoy writing papers
Q2. Sense of accomplishment
Q3. Teacher verbal praise
Q4. Teacher written praise
Q5. Prefer written feedback (WF)
Q6. Prefer verbal feedback (VF)
Q7. WF info better
Q8. VF more effective
Q9. VF more understandable
Q10. VF offers more praise
Q11. WF brings more confidence
Q12. Conferencing helps writing
Q13. Praise affects writing
0
5
10
15
20
25
Frequency
Strongly Disagree
Disagree
Agree
Strongly Agree

Appendix E.1


Post-Likert about Writing
Q1. Enjoy writing papers
Q2. Sense of accomplishment
Q3. Teacher verbal praise
Q4. Teacher written praise
Q5. Prefer written feedback (WF)
Q6. Prefer verbal feedback (VF)
Q7. WF info better
Q8. VF more effective
Q9. VF more understandable
Q10. VF offers more praise
Q11. WF brings more confidence
Q12. Conferencing helps writing
Q13. Praise affects writing
0
5
10
15
20
25
Frequency
Strongly Disagree
Disagree
Agree
Strongly Agree

Appendix E.2

Two-Tailed T-Test Comparison of Pre- and Post-Likert Scores

t-Test: Two-Sample Assuming Equal Variances

	Variable 1	*Variable 2*
Mean	21	24.61538
Variance	76.5	55.58974
Observations	13	13
Pooled Variance	66.04487	
Hypothesized Mean Difference	0	
df	24	
t Stat	2.434205	
P(T<=t) one-tail	0.133955	
t Critical one-tail	1.710882	
P(T<=t) two-tail	0.267911	
t Critical two-tail	2.063899	

Appendix F

ANOVA for Likert Surveys

Anova: Two-Factor Without Replication

SUMMARY	*Count*	*Sum*	*Average*	*Variance*
Q 1	2	20	10	32
Q 2	2	64	32	8
Q 3	2	32	16	98
Q 4	2	35	17.5	84.5
Q 5	2	36	18	0
Q 6	2	31	15.5	0.5
Q 7	2	52	26	8
Q 8	2	42	21	0
Q 9	2	42	21	2
Q 10	2	44	22	18
Q 11	2	65	32.5	4.5
Q 12	2	67	33.5	0.5
Q 13	2	63	31.5	12.5
Column 1	13	273	21	76.5
Column 2	13	320	24.615385	55.589744

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	1401.5385	12	116.79487	7.6362112	0.000662	2.6866371
Columns	84.961538	1	84.961538	5.5549036	0.0362561	4.7472253
Error	183.53846	12	15.294872			
Total	1670.0385	25				

Appendix F.1

ANOVA of Likert Survey for Students Who Prefer Written Feedback

Anova: Two-Factor Without Replication

SUMMARY	*Count*	*Sum*	*Average*	*Variance*
Q5	2	36	18	0
Q7	2	52	26	8
Q11	2	65	32.5	4.5
Column 1	3	73	24.333333	42.333333
Column 2	3	80	26.666667	65.333333

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	211	2	105.5	48.692308	0.0201238	19
Columns	8.1666667	1	8.1666667	3.7692308	0.1917096	18.51281
Error	4.3333333	2	2.1666667			
Total	223.5	5				

Appendix F.2

ANOVA of Likert Survey for Students Who Prefer Verbal Feedback

Anova: Two-Factor Without Replication

SUMMARY	*Count*	*Sum*	*Average*	*Variance*
Q6	2	31	15.5	0.5
Q8	2	42	21	0
Q9	2	42	21	2
Q10	2	44	22	18
Column 1	4	82	20.5	13.666667
Column 2	4	77	19.25	9.5833333

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	52.375	3	17.458333	3.0143885	0.1945137	9.2766282
Columns	3.125	1	3.125	0.5395683	0.5158193	10.127964
Error	17.375	3	5.7916667			
Total	72.875	7				

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