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# Setting Writing Revision Goals After Assessment *for* Learning

Shu-Chen Huang
*National Chengchi University, Taipei, Taiwan*

This study examined the effects of goal setting for revision in an EFL writing classroom where principles of assessment *for* learning (AfL) were followed. Following draft writing, instruction, and assessment, college freshmen were put into control, goal, and goal+ groups. Before students started to revise their drafts, individuals in the goal group were told to decide their revision goals. Those in the goal+ group were further aided with a list of strategies. The control group did nothing prior to revision but only reflected on what they had done after revision. The three groups were compared on three dependent variables: quality of drafts, quality of revisions, and draft to revision improvements. On quality of revisions, the goal+ group performed best, the control group performed second best, and the goal group received the lowest scores. However, there were no differences in the overall quality of drafts nor in the degree of draft-revision improvements among three groups. The study showed that goal setting can be a helpful tool for learners in an AfL-oriented classroom when instruction and practice were repeated and scaffolds were concurrently provided.

## INTRODUCTION

The concept of formative assessment, or more precisely assessment *for* learning (AfL) (Black & Wiliam, 1998), has invited extensive discussion by educational researchers and practitioners in recent years. According to Black and Wiliam (2009), the key aspect of AfL is that, compared to the traditional use of assessment *of* learning that focuses on reporting results and sorting and rank ordering students, AfL assessment can be used to inform teaching and learning. Stiggins and Chappuis (2012) used the metaphor of a global positioning system (GPS) to vividly capture the essence of AfL—giving teachers and learners a clearer sense of where learners are in relation to where the teacher is attempting to take them. The GPS metaphor also implies that the function of assessment is to overtly assess current and desired positions, so teachers and learners do not expend effort aimlessly while navigating. However, the GPS mechanism of assessment alone does not get people anywhere. Rather, it is still the walking and driving that matters. That is to say, unlike assessment *of* learning, in AfL, assessment alone is not enough. The ultimate concern of AfL is still the teaching and learning that comes after formative assessment. As Black and Wiliam (2009) contend, "the issue is not to initiate self-assessment but to make it more overt as a

Correspondence should be sent to Shu-Chen Huang, National Chengchi University, Foreign Language Center, No. 64, Section 2, Zhinan Road, Wenshan District, Taipei, 11632, Taiwan. E-mail: huang91@nccu.edu.tw

step to improvement" (p. 16). Nevertheless, there currently seems to be a lopsided emphasis on assessment, which may give a false impression that assessment from teachers does it all.

A similar awareness has also been highlighted in the discussion of AfL theories. Despite a recent proliferation of AfL studies, Davison and Leung (2009) maintained that the AfL literature to date, unlike traditional educational testing research, lacks unifying theoretical frameworks to systematically consolidate scattered efforts and advance research. However, the situation is changing as evidenced by new discoveries in model building that have made it possible to better problematize AfL and advance research in this area of study. One such effort made by second and foreign language educators is Turner and Purpura's (2015) learning-oriented assessment framework with seven dimensions. Another is Hill and McNamara's (2012) proposed model. Both took into consideration the teacher perspective as well as the learner perspective, the latter being a conceptualization neglected by earlier models.

The learner side of AfL can be divided into two parts, namely, assessment and learning. It is critical in AfL that assessment is not just the teacher's concern. Learners need to acquire the highly complicated, and sometimes very professional, knowledge of standards and criteria to make valid appraisals of their own work and learn more effectively (Bloxham & West, 2007; Sadler, 2010). The other aspect, learning, is of no less importance. After all, the ultimate objective of AfL is not only for learners to self-assess but to enhance learning through assessment. Most studies on facilitating learning through assessment address teacher-made individualized feedback that guides learners forward (Brookhart, 2007; Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006), but there have been considerable concerns regarding its practicality because studies have indicated that generating good feedback can be extremely time consuming for the teacher (Bailey & Garner, 2010; Price, Handley, Millar, & O'Donovan, 2010). Moreover, learners usually do not read it or, when they do, do not understand or cannot make good use of teacher feedback (Bailey & Garner, 2010; Price, Handley, Millar, & O'Donovan, 2010). Other than studies on teacher feedback, there is little research on alternative instructional approaches to learning after assessment. From the existing literature, it may look as though, even in an AfL environment, learners are still seen as passive recipients of teacher-specified feedback. That is, the learner autonomy and empowerment ideal often advocated in AfL does not seem to have been explored much.

Among the student-centered AfL studies (e.g., Rea-Dickins, 2006), consensus on fostering self-regulated learners can quickly be found. For example, Clark (2012) saw formative assessment as an optimal avenue toward self-regulated learning, in which learners plan and monitor, wherein such planning involves goal setting and strategy selection. In a similar vein, Rea-Dickins (2001) pinpointed the importance of both peer and learner self-monitoring in classroom-based assessment. As pointed out by Gipps (1994), self-monitoring their own work is also an ability often demonstrated by competent learners. Such a concept also appears in the development of an AfL instrument. In validating both the teacher and learner versions of their AfL questionnaire, Pat-El, Tillema, Segers, and Vedder (2013) concluded their AfL instrument with two interrelated factors—monitoring and scaffolding.

One vehicle to operationalize learner monitoring and scaffolding, as illustrated in many of the learner-centered AfL studies, is goal setting. Black and Wiliam (2009) said learners in the same class may have different goals. Stiggins (2005) also indicated that an optimistic attitude toward assessment results allows students to evaluate their own work and set goals as they move along the learning journey, improving one aspect at a time and monitoring such improvements over

time. Furthermore, for learners to meet learning goals, Chappuis and Stiggins (2002) said they "must participate fully in creating the goals, analyzing assessment data, and developing a plan of action to achieve the next goal" (p. 43).

Following the above discussion, goal-setting theory, which addresses self-regulation mechanisms and goal-directed behaviors, appears to be relevant. Because goal setting has been relatively less researched in assessment and learning contexts, a discussion of the theory and current empirical findings will follow.

## Goal Setting

Numerous empirical studies on goal setting have accumulated during the past half-century. The theory, primarily applied in workplace and health management to enhance effectiveness and efficiency (Locke & Latham, 1990), concerns human behavior and motivation as well as how effort could be optimally directed under appropriate goals. There is a general consensus that specific, high goals (e.g., getting twice as many products packaged as the previous day) increase individuals' work performances significantly. According to Locke and Latham (2006), "the setting of goals is first and foremost a discrepancy-creating process. It implies discontent with one's present condition and the desire to attain an object or outcome" (p. 265). That is to say, an accepted goal functions as a reference point that guides and gives meaning to relevant mental and physical actions, even when participants report no direct awareness of being primed by that goal. Although space does not permit a more detailed discussion here, relevant goal-setting literature includes its theoretical underpinnings and developments (e.g., Lathem & Baldes, 1975; Latham & Kinne, 1974; Latham & Locke, 2007; and Locke & Latham, 1990), the distinction of effect between performance versus learning goals (Seijts & Latham, 2005), and applications of goal setting in special education (Johnson, Graham, & Harris, 1997; Page-Voth & Graham, 1999).

While most goals have appeared to be facilitative in enhancing work performances, goal setting could sometimes be harmful. Research has shown that goal setting does not always lead to better performance compared to the absence of a goal. Kanfer and Ackerman (1989), in their resource allocation model, indicated a condition in which goals could be deleterious, because goal setting is not merely a theory of motivation; it is a theory of both motivation and ability (Seijts & Latham, 2005; Seijts, Latham, Tasa, & Latham, 2004). In performing a difficult task for which one lacks the necessary ability, high motivation stimulated by goals alone is not sufficient. The necessary skills are yet to be automatized and require conscious self-monitoring and the use of limited cognitive capacity. Under these conditions, high-performance outcome goals, if not established appropriately, may cause individuals to feel anxious.

However, results of goal-setting studies in education have been mixed. In a college psychology course, Fleming (2002) showed improvement on the exam performance of students by introducing goal setting and study strategies. Her experimental group was given two documents to work on—goal-setting forms and activity reports. The relevant learning strategies were addressed in the content of the course itself; thus, the instructor/researcher did not spend additional time discussing the strategies or grading the forms. The learners simply submitted the forms as part of class routine. Although the control group learned the same strategies in the same manner, without the goal-setting forms and activity reports, their exam performance was less satisfactory than that of their peers who were aided by the self-regulatory mechanism that

these two forms afforded. The results seemed to indicate that learners cannot merely be taught strategies and then be able to use them. Simple tools like a goal-setting form and activity report could sensitize and scaffold them to self-monitor and regulate behaviors. These studies raise the possibility that goal setting may be useful in other learning situations.

In the context of foreign language learning, two studies indicated that goals could be framed very differently. First, Kato (2009) studied learner autonomy and self-regulation among college learners of Japanese. Students were required to record and review their learning activities on a weekly basis under either goal-setting or self-assessment conditions. The results showed that both approaches were evaluated as effective by more than half of the students. However, the student surveys revealed that the learners preferred self-assessment to goal setting. Moreover, the beginners appeared to benefit more from such interventions than did advanced learners.

Another way of setting goals to the learners' advantage was revealed in a lab study conducted about 15 years ago. Zimmerman and Kitsantas (1999) devised a revision task in which high-school girls were asked to combine a given series of kernel sentences into a single non-redundant one. The sample included an outcome-goal group focusing on minimizing the final number of words, a process-goal group emphasizing a three-step method, and another group shifting sequentially from process to outcome goals. The results showed that the shifting-goal group outperformed the process-goal group, which in turn outperformed the outcome-goal group. The authors concluded that the progressive mastery of hierarchical goals caused learners to become more independent and more self-motivated and eventually to perform better than the other students. The initial process goals assisted these learners in focusing on their learning. Once they had become more familiar with how to perform their work, the outcome-product goal of reducing the number of words had a positive effect. It should be noted, however, that this well-defined lab task of combining several sentences into one reflects only a small part of the entire spectrum of challenges that exist when learners in naturalistic settings write and revise. The real world of learning to write and revise is much more complicated than Zimmerman and Kitsantas' study may indicate.

To summarize, the above review indicated that goal setting has been found effective in a variety of settings for regulating different types of behaviors, often serving as a simple prime requiring no instruction or particular procedural arrangements, but such effectiveness is dependent on the complexity of tasks and the availability of participant capability and resources. While setting specific high goals improves performance for most straightforward tasks, setting the same goal may be harmful for more complicated tasks if it causes anxiety when participants lack the necessary skills or strategies. Some scaffolds for goal setting, such as those forms and reports used in Fleming (2002), could help individuals achieve goals and eradicate potential problems they encounter. However, it is not clear how goal setting may function in an EFL context, where learners are learning to write and improve their drafts. Because goal setting involves taking actions after identifying the discrepancies between the current and a desired state, which is similar in nature to writing revision and assessment for the purpose of improvement, goal setting has the potential to help learners advance their learning after assessment.

## Goal-Setting After Assessments for EFL Writing

Considering the research on goal setting, the current study examines the effect of goal setting in facilitating learner revision of writing in a tertiary-level English-as-a-foreign-language (EFL)

writing classroom, which had been designed to use AfL principles. The Assessment Reform Group (ARG, 2002), a policy task force brought together by the British Educational Research Association, has published a leaflet outlining 10 research-based principles of AfL guiding classroom practice. These principles include assessment being part of effective planning, focusing on how students learn, promoting understanding of goals and criteria, and helping learners know how to improve, among others. Most writing classrooms that incorporate drafting and revision could be considered partially following AfL principles in that opportunities are provided for learners to improve upon their work through the provision of targeted feedback.

The choice of EFL writing revision as a research context was based on the compatibility of its nature with that of AfL. Learning to revise one's own drafts is one important part of learning to write. To apply the GPS metaphor from Stiggins and Chappuis (2012), the draft exemplifies the current state or starting point and the revision process displays one's intended path to the desired destination, the polished revision. There are many possible routes to that destination, which require a lot of effort to understand and practice. This is unlike simple problems with one correct answer. Revision is a very complicated task for experienced writers, let alone foreign language learners. In addition to clarifying and organizing ideas, these learners also have to examine if their meaning is obscured because of the limitations placed by their developing language abilities. Getting to where learners want to go, even when they know the target well, is a long journey that requires a lot of practice. Williams (2004) described revision as both a goal- and problem-oriented process. She distinguished three linear stages of revision as detection/evaluation/comparison, diagnosis/identification, and operation/execution/correction. These stages are sometimes condensed in a two-stage model (e.g., Myhill & Jones, 2007) requiring two types of abilities. First, writers must be able to assess the quality of their own drafts and identify areas for improvement. With writers acknowledging possible problems, the desired improvement constitutes the goal of a revision task. Second, writers need access to various techniques to revise those areas. A common typology, according to Myhill and Jones (2007), includes global revisions of meaning and structure and local revisions of grammar and lexis. Writers may add, delete, substitute, or reconstruct existing texts. During the revision process, reference resources, such as dictionaries or opinions from others, can be sought. Revision is not easily automatized; it requires conscious effort and self-monitoring, a process in which goal setting may be a contributing factor.

## THE CURRENT STUDY

In this study the researcher experimented with three situations: (a) control, in which learner revision was not primed (or interfered with) by goal setting; (b) goal, in which goals were set by learners before revision; and (c) goal+, in which goals were set by learners and a list of strategies were provided to them. A more detailed description of these three groups is provided later in the subsection "The Experimental Groups." The following research questions were posed:

1. Did student writing improve from each draft to its revision under the three conditions of control, goal, and goal+? Were there differences among the three groups?
2. In view of the entire learning cycle, did the quality of the three drafts or three revisions improve over time? Were there differences among the three groups?

Guided by previous studies, goal setting was operationalized in a more straightforward (goal) and a more facilitated (goal+) manner, results of which were compared with a base condition where AfL was not intervened with by goal setting (control). It is hoped that this study may inspire more of its kind in understanding and exploring AfL for the benefits of teachers and learners alike.

## Participants

One hundred eleven freshmen in a Taiwanese university participated in the study. Admitted to this university based on the scores of two national entrance examinations, these students generally had more satisfactory academic performance than those admitted to other universities in Taiwan. Students' areas of study included social sciences, business management, various foreign languages, and mass communication. Within the university, business students generally scored higher in the entrance exams than those in other fields. But for their English test scores upon entrance, on a standardized scale of 15 (with 15 as the highest and 0 the lowest), participants in the current study, despite different majors, received scores of 15 or 14 except for one score of 13 and one of 12. Students were enrolled in three different sections of a required freshman English course taught by the same researcher/instructor using the same syllabus and materials. They met once a week for two 50-minute sessions. The high-school English writing experience of these learners was primarily based on the composition component of the entrance examination, which is usually a narration. The three intact groups were randomly assigned to one of three treatments: control, goal, and goal+.

## Instructional Procedures

The target genre was argumentation in the form of a 300-word opinion essay. In the writing component of this four-skills, 18-week course designed following AfL principles (ARG, 2002), the students were expected to understand the basic criteria and standards of good argumentative essays, to assess their drafts against these criteria, and to revise their drafts accordingly. The learners progressed through the same learning cycle in three rounds of writing (round 1: weeks 4 and 5; round 2: weeks 7 and 8, round 3: weeks 12 and 13) for three prompts on topics related to campus experience (shown in Appendix A). For each two-week unit, the three groups participated in the same procedures, except for the last 50-minute period, during which they worked on their revisions. Figure 1 illustrates the procedure in detail.

As shown on the upper left-hand side of Figure 1, all three groups began with drafting individually for 30 minutes. After the first drafts were completed, the instruction began. Learners were guided through the review of a sample essay by working with the in-house instructional rubrics, in which five levels of performance converted into 15 individual levels for instructional and research purposes (as shown in Appendix B; adapted from ETS [2009]—*TOEIC Examinee Handbook—Speaking and Writing*, p. 22). To illustrate the instructional content and procedures, one class handout, which included (a) the original sample, (b) evaluation of the sample based on the rubrics, (c) marginal notes for instructional purposes, and (d) the subsequent revised sample, is provided in Appendix C. On the basis of these criteria, the instructor evaluated the sample essay and showed the learners what had been done well, what could be improved, and why these

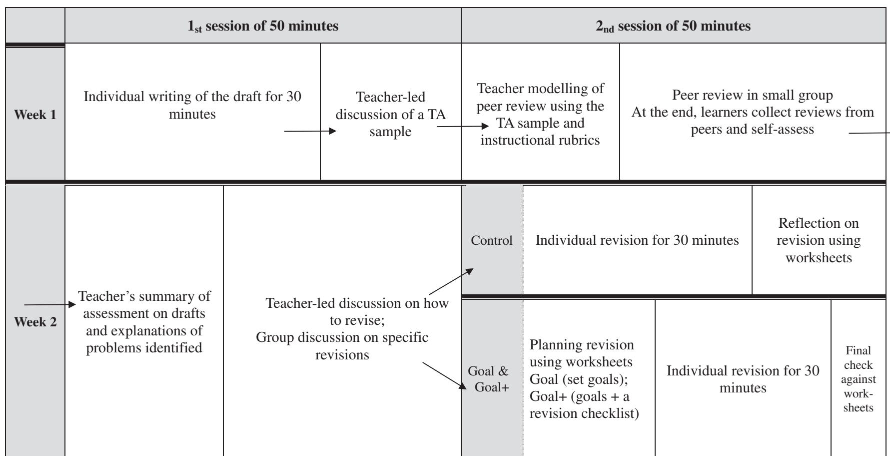


FIGURE 1 Instructional steps of one draft-instruction-revision unit in the three groups.

areas needed improvement. This discussion was a model for the follow-up learner peer review in small groups. In groups of three or four, the learners rotated their drafts and provided evaluation to their peers' essays. They used the same rubrics to provide numerical figures (on a scale of 1 to 15) and open-ended verbal comments. The student authors then collected assessment sheets from peers, clipped them together with their drafts, and submitted their work before the end of the class meeting in the first week.

In the following week the instructor returned the drafts to the students and delivered a 50-minute lesson based on AfL principles. First, a summary of the assessment of the student drafts was presented in bullet points, including areas that were done well and those in need of improvement. More time was spent on the latter part, including the identification of common problems, anonymous student excerpts illustrating the problems, and discussions of how the problems could be corrected. Students were also asked to discuss the problem in small groups to produce a collective solution. These results were subsequently presented to the class on the blackboard. The instructor then guided the learners through these solutions and discussed their plausibility. Different strategies for revision were taught as mini-lectures at the end to inform students of various approaches that they could use. Until this point, the experience of all three groups was identical. The only difference occurred during the second period of the second week, as shown on the lower right-hand side of Figure 1, when the participants were asked to work on the revision of their draft.

## The Experimental Groups

Situated in a university College English course, the study used a quasi-experimental design in which three intact classes were randomly assigned to control, goal, and goal+ groups, with two different types of interventions administered to the two experimental groups.

### The Control Group

This group was told to revise their drafts without any intervention. After 30 minutes, when the participants completed their revision, they were given a worksheet and 20 minutes to self-assess and reflect. The first part of the worksheet enabled the learners to record peer assessments on their drafts and their self-assessment on their drafts and revised work. The second part of the worksheet asked the learners to reflect and record the strategies that they used in revising their drafts. All three worksheets are shown in Appendix D.

### The Goal Group

This group was given written instructions and 15 minutes to work on this task independently before revision began. The sheet listed the five criteria from the instructional rubric, which had been discussed and used by the learners in class discussion and peer review. The instructions asked them to circle the criterion or criteria that they wanted to focus on for their revision. These five possible goals included holistic quality, argumentation, organization, lexical use, and grammar. The participants could also decide to work on single or multiple goals. According to past research findings, the provision of choice rather than an arbitrary assignment of goals can increase learner commitment (Locke, 1996). The learners in this group were expected to draw on the same instructional resources that the previous group had been exposed to, and the establishment of goals was intended to direct their attention to selected aspects of their revisions so that they would not feel overwhelmed in handling such a complicated task as revising a draft. Immediately below the area in which they circled their goals, a blank table was provided to enable the learners to write down the strategies that they intended to use in their upcoming revision. Subsequently, they began to revise their drafts for a total of 30 minutes. At the end of the class period, approximately 5 minutes were allotted for students to reflect and check their original strategy list. The learners also performed the same self-assessment that the control group had done.

### The Goal+ Group

This group experienced the same goal-setting procedure as the goal group within the same length of time. The only additional feature was the provision of a strategy list immediately below the same blank strategy table that the goal group had. The list was adapted from handouts pertaining to proofreading from Purdue University's Online Writing Lab (Wells, Sousa, Martini, & Brizee, 2012). This list included general writing revision strategies that were discussed in class: rereading drafts; underlining areas that may cause confusion; verifying that main ideas are well supported by details; and adding, deleting, and substituting information, words, and phrases. From this list, learners chose the strategies that they intended to use in the upcoming revision. Although not compiled with specific reference to the stated revision goals, some of the strategies were more relevant to one goal than another. For example, "to strengthen argument" (as shown in the last part of Appendix D) was related to the second goal "argumentation" and ought to be applied if this goal was chosen. Learners were left on their own in choosing compatible strategies without further priming from the researcher/instructor.

The list provided to the students was believed to provide an additional resource for learners attempting to meet revision goals. This treatment may help answer the question of whether such an additional resource was necessary for goal setting. Similar to those in the goal group, the students spent 5 minutes checking their self-set lists after completing their revisions and conducted self-assessment.

### Determining the Quality of Drafts and Revisions

To evaluate the quality of student writing, two independent raters were paid to rate all drafts and revised versions. They both received learner work in one batch for the same topic before moving on to the next writing topic, for a total of three rounds. They rated using a holistic scale of 1 to 15, with 1 indicating the poorest quality and 15 indicating the highest, using the same rubric as provided to learners. One of the raters was an experienced EFL instructor and had been involved in the rating of English writing for national college entrance exams and a national standardized EFL proficiency test, in which she rated similar levels and genres of writing as those of this study. The other was a research assistant from the same university who had been trained and worked under the supervision of the researcher for 2 years prior to the study.

## DATA ANALYSIS AND RESULTS

The inter-rater reliability of the writing scores between the two raters, as computed by Pearson product-moment correlation, was .72 ($p < .05$). The composite scores between the two raters were then used for all follow-up analyses. Only complete draft-revision pairs of composite scores were used in analysis.

Descriptive statistics, including the average scores of the three pairs of drafts and revisions from the three groups, are shown in Table 1. The means ranged from 6.65 to 10.23. The skewness and kurtosis values lay within −2 to +2, thereby providing evidence of a normal distribution of the variables. All groups performed better on their revisions than in the associated drafts. The control group improved from the first draft to the first revision and further improved from the second draft to the second revision; however, there was a decrease in quality in the third draft before the score picked up again in the third revision. The students in the goal group

TABLE 1
Descriptive Statistics for All Drafts and Revisions (k = 15)

| | | *Control (n = 40)* | | | *Goal (n = 35)* | | | *Goal+ (n = 33)* | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | *M* | *SD* | *95% CI* | *M* | *SD* | *95% CI* | *M* | *SD* | *95% CI* |
| **1st** | Draft | 8.16 | 1.74 | [7.60, 8.72] | 8.67 | 1.69 | [8.09, 9.25] | 6.73 | 2.29 | [5.91, 7.56] |
| | Revision | 9.36 | 1.76 | [8.78, 9.95] | 9.66 | 1.79 | [9.01, 10.32] | 8.54 | 2.09 | [7.73, 9.34] |
| **2nd** | Draft | 9.50 | 1.29 | [9.07, 9.93] | 8.73 | 1.44 | [8.22, 9.24] | 7.61 | 2.30 | [6.78, 8.44] |
| | Revision | 10.23 | 1.30 | [9.78, 10.68] | 9.60 | 1.08 | [9.15, 10.05] | 8.98 | 2.17 | [8.19, 9.78] |
| **3rd** | Draft | 7.81 | 2.25 | [7.03, 8.59] | 6.65 | 2.56 | [5.71, 7.58] | 8.43 | 1.43 | [7.89, 8.98] |
| | Revision | 8.28 | 2.01 | [7.63, 8.93] | 7.89 | 2.43 | [6.84, 8.94] | 9.56 | 1.34 | [9.02, 10.10] |

TABLE 2
Mean Gain Scores From Draft to Revision

| | *1st Writing* | | | *2nd Writing* | | | *3rd Writing* | | |
|---|---|---|---|---|---|---|---|---|---|
| *Groups* | *M* | *SD* | *95% CI* | *M* | *SD* | *95% CI* | *M* | *SD* | *95% CI* |
| Control | 1.22 | 0.83 | [0.94, 1.49] | 0.68 | 0.70 | [0.43, 0.92] | 0.62 | 0.71 | [0.37, 0.86] |
| Goal | 1.18 | 1.14 | [0.76, 1.60] | 1.00 | 0.82 | [0.66, 1.34] | 0.80 | 1.19 | [0.29, 1.32] |
| Goal+ | 1.71 | 1.65 | [1.08, 2.35] | 1.37 | 1.83 | [0.70, 2.04] | 1.04 | 0.87 | [0.69, 1.39] |

performed better than the other two groups in the first task. The scores for their second drafts and revisions were relatively similar to those that they had obtained in the first round, but the decrease in quality in the third round was more obvious than for the control group. The improvement of the goal+ group over the course of the three tasks was steady, although their initial scores were significantly lower than those of the other two groups. Eventually, in the third round, these students outperformed the other groups and obtained the highest scores among the three.

The scores for the first drafts were compared by using an ANOVA to examine whether the three intact groups differed in writing performance before the treatment. The ANOVA was significant, $F(2, 104) = 9.21$, $p < .001$. Multiple comparisons using Tukey tests revealed that the third group, goal+, had scored significantly lower than both the control and the goal groups. This difference was later controlled as covariates in follow-up comparisons using an ANCOVA.

To determine whether learner revisions improved compared to their drafts, each score on the revised version was subtracted by its associated draft score. Descriptive statistics for the resulting figures are presented in Table 2, including means, standard deviations, and 95% confidence intervals. As shown, all of the means were positive, and all of the ranges of confidence intervals were above zero, indicating that all three groups had improved significantly on all three writing tasks.

To examine whether the draft-revision improvement among the three groups differed, ANCOVAs were performed, with the first draft scores as the covariate, for three groups under three tasks. The results in Table 3 indicate that for all three tasks, the $p$ values were greater than .05. That is, the three groups did not differ in their levels of single draft-revision improvements.

To examine improvement across tasks, drafts and revisions of the three groups were compared separately. First, a repeated-measures ANOVA was conducted on the drafts. Results revealed that the difference among the three groups was not significant, $F\ (2, 87) = 2.64$, $p = .077$. That is, when the draft scores from three tasks were considered together, none of the three groups differed from the others across the groups.

To compare the three groups on their revisions, as in previous ANOVAs, a test of the homogeneity of the regression coefficients was performed. The results indicated that the interactive effect between the independent variable (group) and the covariate (the score for the first draft) was significant ($p < .05$). Therefore, the estimated regression coefficients were calculated for use in a follow-up ANOVA. A repeated-measures ANOVA was then performed on the revisions among the three groups, $F\ (2, 72) = 155.65$, $p < .001$. Results suggest that the three groups differed in their revision scores. Multiple Bonferroni comparisons in Table 4 show that

TABLE 3
Summary of the ANCOVA on the Draft-Revision Improvements

| *Source of Variance* | *df* | *F* | *p* | $\eta^2$ | *obs. power* |
|---|---|---|---|---|---|
| ANCOVA Summary for the 1st Writing | | | | | |
| Score of First Draft | 1 | 14.34 | 0.000 | 0.135 | 0.963 |
| Group | 2 | 0.22 | 0.803 | 0.005 | 0.084 |
| Within-Group Errors | 92 | (1.29) | | | |
| ANCOVA Summary for the 2nd Writing | | | | | |
| Score of First Draft | 1 | 0.51 | 0.479 | 0.006 | 0.108 |
| Group | 2 | 1.62 | 0.203 | 0.037 | 0.334 |
| Within-Group Errors | 85 | (0.94) | | | |
| ANCOVA Summary for the 3rd Writing | | | | | |
| Score of First Draft | 1 | 3.79 | 0.055 | 0.046 | 0.485 |
| Group | 2 | 0.84 | 0.437 | 0.021 | 0.189 |
| Within-Group Errors | 79 | (0.81) | | | |

TABLE 4
Multiple Comparisons of the Revisions of the Three Groups Using Bonferroni Tests

| *(I)Group* | *(J)Group* | *Mean Difference (I-J)* | *p* | *Difference 95% CI* | |
|---|---|---|---|---|---|
| Control | Goal | 1.61*** | 0.000 | 1.18 | 2.04 |
| | Goal+ | −1.69*** | 0.000 | −2.08 | −1.29 |
| Goal | Control | −1.61*** | 0.000 | −2.04 | −1.18 |
| | Goal+ | −3.30*** | 0.000 | −3.76 | −2.84 |
| Goal+ | Control | 1.69*** | 0.000 | 1.29 | 2.08 |
| | Goal | 3.30*** | 0.000 | 2.84 | 3.76 |

when all three rounds of writing were considered, the goal+ group performed better than the control group, and the control group in turn performed better than the goal group.

Furthermore, to understand learners' choices of revision goals, the type and number of goals as chosen by the goal and goal+ group students were tallied (see Tables 5 and 6). The summary of goal choices indicated that these learners focused more of their revision attention on essay argument and organization than on lexis and grammar. The majority of learners picked two goals to work on at the same time. The number of learners working on single goals accounted for 16% of the goal and 30% of the goal+ groups.

TABLE 5
Types of Revision Goals Chosen by the 2 Experimental Groups

| *Goal Type* | *Holistic* | | *Argument* | | *Organization* | | *Lexical Use* | | *Grammar* | |
|---|---|---|---|---|---|---|---|---|---|---|
| Goal | 18 | (12%) | 42 | (29%) | 36 | (24%) | 32 | (22%) | 19 | (13%) |
| Goal+ | 13 | (9%) | 38 | (27%) | 37 | (26%) | 25 | (18%) | 28 | (20%) |

TABLE 6
Number of Goals Picked by Individual Students in the 2 Experimental Groups

| *Number of Goals* | *0* | | *1* | | *2* | | *3* | | *4* | | *5* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Goal | 13 | (16%) | 13 | (16%) | 31 | (39%) | 21 | (27%) | 0 | (0%) | 1 | (1%) |
| Goal+ | 11 | (12%) | 27 | (30%) | 41 | (46%) | 8 | (9%) | 3 | (3%) | 0 | (0%) |

## DISCUSSIONS OF RESULTS

The results provided clear answers to the two research questions. First, all nine draft-revision pairs showed significant improvement across the three groups and occasions. This is a message that, from each draft to its revision, learners under all three conditions were able to improve their work, despite the differences in the final revision arrangement (as shown in the lower right-hand side of Figure 1). Although the assessment-based instruction as described in this study might still not measure up to the customized guidance afforded by individual teacher feedback, the fact that it brought improvement bears some theoretical and pedagogical significance. One should note that, although draft-revision is a common practice in learning writing, measurable improvement is not always guaranteed. One such example was learners who visited a writing center and received tailored feedback but ended up merely copying tutor comments (Williams, 2004). In other words, instructions adhering to AfL principles, as demonstrated in this study, helped EFL learners improve their drafts, although the same principles could be carried out in many different ways. The answer to the second half of the first research question revealed that the level of draft-revision improvement was indistinguishable among the three treatment groups. That is to say, neither goal setting nor goal setting with scaffolding, as operationalized in this study as goal and goal+ groups, respectively, was better than a no goal-setting control group when examining single draft-revision improvement.

Second, to answer the second research question on the improvement of drafts and revisions over time, learner performance on all three tasks was compared across groups. There was again no significant difference in the quality of drafts. However, when comparing their revisions, the difference was significant; the goal+ group, aided by a strategy list in addition to goal setting, produced better revisions than the control group, which in turn outperformed the goal group that set goals without the assistance of a strategy reminder.

Putting the data analyses together, inter-group comparisons were conducted by examining writing scores at three levels: draft-revision difference, drafts, and revisions. At the draft-revision level, the result represents an immediate effect. The quality drafts on new topics could be seen as a sign of internalization of learning from previous tasks. As for the revised versions, the observed group difference may be indicative of a treatment effect present only after it had been accumulated over the entire experiment. Under the above reasoning, the aggregate results of this study suggest a moderate to weak claim for the existence of a goal-setting effect in the EFL writing revision context. The conditions for the goal-setting effect to be apparent included having three rounds of draft-revision practice in an assessment sensitive classroom and the scaffolding afforded by the additional strategy list. Moreover, when goals were not supplemented by the strategy list, learners were probably better off not being asked to set revision goals.

## Implications for Goal Setting

This study supplied evidence from a writing classroom for what has been found about goal setting in the workplace and other behavior regulation situations. As Seijts and Latham's (2005) contended, goal setting is a way to motivate, but for goal setting to successfully motivate, individuals' ability for performing the goal has to be in place as well. That is to say, when a task is complex and requires learning and when the performer lacks the necessary strategies and skills, goals could be deleterious. The current study found a similar effect in that the goal group, lacking a strategy reminder, seemed to run into similar problems. Although specific strategies were taught in all groups, goal setting not aided by a strategy list on the worksheet resulted in the least favorable condition, because merely setting goals may have aroused stress in the learners when the revision task they tried to complete was something they were still learning. This indicates that for goals to be facilitative rather than debilitative, appropriate scaffolding is a prerequisite.

The scaffolding offered in this study, a simple list of revision strategies, was similar to Fleming's (2002). The scaffolds afforded in the strategy list reminders took very little teacher time to prepare, yet with its presence participants in this goal+ condition scored higher in their three revised versions than those in the other two groups. Despite the fact that these strategies were part of the lessons for all three groups, instruction alone was not enough. The goal group, not aided by this reminder, performed less satisfactorily, to the degree that they were outperformed by the control group. This suggests to classroom teachers that learners need constant facilitation and such facilitation involves attention to affective and cognitive aspects of learning. Present in the goal+ group but incomplete in the other two were three necessary conditions for learning to happen. These were opportunities to act (revising a draft), focusing of attention and effort (setting goals), and reminders for newly learned strategies (a strategy list).

The fact that group differences were only present in revised versions yet not in drafts and draft-revision improvements suggests that we still cannot rule out the possibility of goal setting being ineffective, at least in its current form. With no more guidance than having learners to choose and focus on specific aspects of the revision activity, some learners were probably unable to identify an appropriate goal themselves. For example, one learner having major problems with organization on a draft may have decided to work on minor grammatical mistakes and failed to improve the organization. This has to do with the operationalization of goals and the complexity of tasks.

As reviewed previously, the goal in Zimmerman and Kitsantas (1999) was as straightforward as minimizing the number of words in a combined sentence. Although controlling the number of words is hardly a goal for any writing learner, there was no ambiguity on how well goals were met. Unlike those in the lab setting, goals and tasks in this study reflected the real world of learning to write. The choice of five general goals directed learners to somehow break down the daunting revision task and work on one aspect at a time. Whether and how well each goal was met, however, was a very complicated issue and was not dealt with in this study. Between these two very disparate types of goals, there is room for many possibilities in framing and setting goals. Unfortunately, existing goal-setting literature does not seem to inform us much about how learning goals could be more effectively set. Goal-setting studies, originating from workplace management, largely concern what people are capable of doing and doing it more productively. Little is known to date about setting goals for language learners, except that, in complicated tasks where skills are yet to be automatized, performance outcome goals should be replaced by learning goals and scaffolding (Latham & Locke, 2007; Locke & Latham, 2006).

For goal setting in the language-learning context, one future direction may be for teachers to spend time breaking down and analyzing their own well-established behaviors that learners are trying to master. As seen in this study, simple tools such as the goal-setting worksheets probably helped make the implicit and necessary thought processes of experienced writers more explicit and manageable for inexperienced learners. Once classroom teachers identify an area in which learners need practice, time and effort should be spent devising tools and procedures to facilitate learners to grasp the necessary steps.

Moreover, although learner choice of goals was not a focal point in this study, data in Tables 5 and 6 indicated that learners paid more attention to global (argument and organization) than local (lexis and grammar) aspects of their texts and the majority worked on two goals at the same time. This information also pointed to areas of future research on goal setting for learner preferences and the underlying reasons.

## Implications for AfL

Goal setting is, after all, just one vehicle that operationalizes learner planning and monitoring in the process of assessment and learning. Using such a vehicle was an endeavor to enable learners in the goal and goal+ groups to participate in deciding on revision goals. Ideally, when revision goals were set and committed to, learners tried to achieve those goals by first assessing their drafts against the goals and then taking actions to accomplish those goals. These two stages, when put together, formed a complete AfL cycle. The same can be explained by the GPS metaphor—learners were made aware of both their current position and destination through assessment and then started to move toward that destination with the assistance of goal setting and learning strategies. Much has been discussed in recent AfL literature concerning the first half of assessment, but this study supplied relevant data concerning the second half of assessment, namely "getting there," and finding ways to facilitate and empower learners.

As pointed out by Hill and McNamara (2012) and other scholars, assessment research used to focus on teachers and how teachers go about assessing learner performance. Lacking in the landscape are studies on learners as well as on how assessment can inform and benefit classroom learning. Even in the wider general education context where studies on AfL are abundant, efforts related to learning after assessment have mainly been about teacher feedback (Hattie & Timperley, 2007), focusing on what teachers do rather than what learners do. This study called for attention to facilitating learner learning subsequent to formative assessment, and it demonstrated that this might be a worthwhile research direction.

As shown, the revised work produced by goal+ group learners scored highest. This was a result from the deliberate guidance designed in the worksheet, for which teacher preparation was shifted from what he or she does to what he or she can help learners accomplish. Although reservations are needed, due to the small scale and naturalistic setting, in interpreting the results and claiming the efficacy of goal setting for learner revision in its current form, more research into the learner and learning side of AfL is warranted. Goal setting may represent just one possible approach of facilitating and empowering learners after they have been engaged in assessment for the purpose of learning. There may be other methods that can help learners self-regulate behaviors. What these other methods are and how they could be effectively carried out constitute important questions for researchers and teachers who want to make the best of AfL.

The fact that all three groups improved in all three rounds from draft to revision should not be neglected. As noted in the beginning of the discussion section, draft-revision improvement is not always guaranteed for writing learners, although it may easily be taken for granted. Despite the group differences in goal-setting arrangement, all participants learned in an environment designed to fulfill AfL principles, the design of which has been explicated in Figure 1 and the beginning of the methodology. How well that design actually adhered to AfL principles is subject to more scrutiny, but working to realize AfL principles seemed to pay off. Current AfL literature provides convincing reasoning and does not suffer from any paucity of principles (e.g., ARG, 2002; Nicol & Macfarlane-Dick, 2006), some based on empirical evidence and others not quite so. But principles do not readily translate to indisputable practices, and they need to be validated with more rigorous research and interpreted by practitioners in real classrooms. The current study is just such an effort and the results point to the value of incorporating assessment and making it an explicit component in learning to revise in EFL writing.

One note has to be made about the learner population. Many assessment studies are connected with learner self-regulation (e.g., Clark, 2012; Nicol & Mcfarlane-Dick, 2006) and goal setting (e.g., Zimmerman & Kitsantas, 1999). Assessment, which used to be considered a power solely at the teacher's disposal in the "black box" (Black & Wiliam, 1998), has now become a way for teachers to empower and a tool for learners to self-regulate. Participants in this study were from a first-tier college specializing in humanities and social sciences. Leaving them more room to develop self-regulation and autonomy may bring valuable impact in the long journey of improving their writing. However, before applying or modifying the goal-setting strategies as exemplified in this study, it has to be kept in mind that the participants here were relatively high achievers among the majority of college students in the country. More research is needed to inform us whether additional facilitation may be needed for learners from different age groups or at a lower proficiency or cognitive level.

An additional note has to do with the subject matter or discipline in which AfL studies are carried out. While AfL studies have been introduced to applied linguistics and language teaching, most AfL study findings have been based on science, math, and language arts in Western school contexts (Marshall, 2007). Results are not readily applicable for language teachers in other learning and social environments. This study is a preliminary attempt to explore the application of AfL principles to writing instruction in an EFL tertiary classroom. Many other subareas of second/foreign language teaching and learning may consider using assessment to facilitate learning. Could these other areas benefit from AfL as well? For example, will a different skill, such as speaking that is usually not revisited as writing is, require very different pedagogical strategies? These are questions to be answered in future studies.

Moreover, the fact that it took three draft-revision rounds for difference in revisions to be observed also has implications, although this may not be a surprise to EFL practitioners. As Marshall (2007) has pointed out, the learning progression of languages, the humanities, and social sciences, unlike that of science and mathematics, "is a much messier business" (p. 136). The understanding of important concepts usually varies considerably and conceptual understanding does not guarantee performance ability. It is therefore necessary to highlight and further investigate the differences among disciplines so that classroom teachers in various fields are not disappointed when they encounter difficulties and setbacks. Because the routes to learning targets in the humanities and social sciences are usually meandering and less direct, they pose

more challenges for both teachers and learners. More studies are needed in these areas to explore the subtlety of AfL principles and pedagogies.

## LIMITATIONS AND CONCLUSIONS

Although efforts were made to control variables, this quasi-experiment was conducted in a naturalistic classroom setting in which strict comparisons were compromised by curriculum considerations. For example, the three writing prompts, even though broadly falling in the same genre category of argumentation, could be further distinguished into different subtypes of argumentation. There may, therefore, be a task effect that accounts for some of the observed variability.

Second, the data analyses conducted in this study were based mainly on numerical ratings of learner work, which was of a more superficial level. There was no attempt in examining whether specific learner goals were really met and whether meeting the goals was associated with writing scores. Other types of data analyses, such as comparison of text features used to investigate areas of improvement and lack thereof, or actual learner experience on choices of goals, strategies, difficulties, and affect, could arguably provide more insight for how goal setting influences learner writers' performance and cognitive and affective development. Future studies may consider using questionnaires, interviews, or case studies for more insights.

Another limitation was the time span. In the type of learning that requires long-term effort and persistence, time is an important issue. If this study had been a one-shot experiment, the influence of goal setting on learner revision would not have been observable. Even so, while the three-round design expanded the time frame, it still constituted a compromise because it was unable to capture real-world longitudinal phenomena. Future studies may examine longer-term effects to determine the efficacy of goals and further explore relevant mechanisms.

If more time is allowed for different aspects of revision to be addressed separately in greater detail and compared, then learner goals and revision work could probably be more focused (e.g., one revision for grammar and another revision for lexis). These may contribute to the understanding of the relative difficulty of different aspects of revision for learners and lead to more effective instruction. The same idea may apply to the provision of a strategy scaffold. The list that was used in this study featured approximate descriptions of revision strategies, and the learners needed to exercise discretion about when and how to use these strategies. In a full-fledged writing course, a teacher could further explicate these strategies and render them more focused and accessible to learners to find out if some strategies may be more learnable than others.

Finally, this study suggests that goal setting could help learners revise their writing effectively when the strategies they learned were provided as a reminder list. More importantly, it indicates that assessment is not just teachers' business. Learners can and should learn to assess and improve their own work against stipulated standards, consequently contributing more clarity of direction to their learning journey. The learner side of assessment, as advocated by Hill and McNamara (2012), is worthy of more research attention. Moreover, for teachers, assessment is no longer just a way of testing and ranking students. A promising future of teaching and learning is closely associated with assessment. Language teachers need to know that assessment has great potential to make the classroom a better place so that they may use it to their advantage. In a time when rapid technology development has gradually threatened to replace teachers with new

programs such as Internet course packages and automated grading, professional assessment and adequate scaffolds tailored to learner needs illustrate the enduring value of classroom teachers.

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## APPENDIX A: THE THREE WRITING PROMPTS

1. Discuss the advantages and disadvantages of having a job while in college and then state your own opinion.
   *Audience*: Your teacher and fellow students

2. Many college teachers encourage group discussions among students. But some students feel it's a waste of time listening to peers compared to listening to teachers. Do you agree that teachers should encourage more group discussion? Use specific reason or examples to support your answer.
   *Audience*: Your teacher and fellow students
3. In some universities, college students do not choose their majors until the second or third year, while most students in Taiwan are put into different professional/academic departments when they are admitted. Which do you think may be a better arrangement for college students? Why? Provide your reasons with some details.
   *Audience*: Your teacher and fellow students

## APPENDIX B: INSTRUCTIONAL RUBRICS

| | *Response Description in Different Subsections* | | | |
|---|---|---|---|---|
| *Scale* | *Argument* | *Organization* | *Lexical Use* | *Grammar* |
| 15 | A response at this level largely accomplishes all of the following: | | | |
| 14<br>13 | It effectively addresses the topic and task. | It is well organized and well developed, using clearly appropriate explanations, exemplifications, and/or details. | It displays consistent facility in word choice and idioms, though it may have minor lexical errors. | It demonstrates syntactic variety, though it may have minor grammatical errors. |
| 12 | A response at this level largely accomplishes all of the following: | | | |
| 11<br>10 | It addresses the topic and task well, though some points may not be fully elaborated. | It is generally well organized and well developed, using appropriate and sufficient explanations, exemplifications, and/or details. | It displays facility in the range of vocabulary, though it probably has occasional noticeable minor errors in use of idiomatic language that do not interfere with meaning. | It demonstrates syntactic variety, though it has occasional minor errors in structure and word form that do not interfere with meaning. |
| 9 | A response at this level is marked by one or more of the following: | | | |
| 8<br>7 | It partly addresses the topic and task. | It contains somewhat developed explanations, exemplifications, and/or details. | It demonstrates inconsistent facility in word choice that may result in lack of clarity and occasionally obscure meaning. | It displays limited range of syntactic structures and inconsistent facility in sentence formation. |
| 6 | A response at this level may reveal one or more of the following weaknesses: | | | |
| 5<br>4 | Limited development in response to the topic and task. | Inadequate organization or connection of ideas. | A noticeably inappropriate choice of words or word forms. | An accumulation of errors in sentence structure and/or usage. |
| 3 | A response at this level is seriously flawed by one or more of the following weaknesses: | | | |
| 2<br>1 | Questionable responsiveness to the task | Serious disorganization or underdevelopment | Serious and frequent errors in word usage | Serious and frequent errors in sentence structure |

## APPENDIX C: AN ASSESSMENT EXAMPLE DEMONSTRATED TO STUDENTS

### Writing Prompt 3:

In some universities, college students do not choose their majors until the second or third year, while most students in Taiwan are put into different professional/academic departments when they are admitted. Which do you think may be a better arrangement for college students? Why? Provide your reasons with some details.

**Comment [u1]:** Read the prompt carefully. The first part sets the scene. Then the "Which" and "Why" questions tell you what to do in the essay. Make sure you answer these questions and not others.

### Sample Essay – Original

For most of the freshmen in Taiwan, the definition of "university" is "play to your heart's contend for four years." They worked extremely hard in high schools and tried their best to get the highest scores in College Entrance Exam. Finally, they chose their college majors according to their interests and score; however, for most of the time, scores had more to do with the majors they chose. If we ask any freshman, "why you chose your major?" 8 out of 10 might answer, "I don't know, by coincidence maybe, because me score matched this major." However, a college major is pre-training for a person's future career, having significant impact on one's future life. To decide one's major merely by "coincidence," seems to be ridiculously wrong and lack of prudence. Therefore, I strongly disapprove the idea of forcing students to choose a major in their first year of college.

**Comment [u2]:** The inclusion of "their interests" may obscure the writer's position.

**Comment [u3]:** could be explained more clearly

**Comment [u4]:** Good thesis

Some may compare Taiwan's college system with the US's college system by how much they cost, saying that since the colleges in the US are more expensive, it is crucial for students to think more before declaring a major. While Taiwanese colleges are cheap, it is okay if one chose a wrong major at the first place. It is true that the average cost of Taiwanese colleges may be twenty times less than American ones, but it is false to say that we can treat them less seriously since they cost less. In fact, I think Taiwanese students are the ones that need more thorough thinking before they decide their majors.

In Taiwan, students are trained to be "test-taking machines" since junior high. Always occupied by endless tests and tight schedules, they gradually get used to the monotonous daily routine, lacking the impetus to explore the world outside their classrooms. In this situation, the chance for them to find what they really want to do in the future is thin. What's worse, with the recent college arrangement, these students do not have chance to find their real interest even after they go into colleges.

Given my friend Hedy as an example, Hedy had always been the top students in her class since I knew her in elementary school. She kept her outstanding records all through junior high and she went to Taipei First Girls High School. We went to the college at the same year. I got into NCCU, while she got into the Law School in NTU, which didn't surprise me too much. I didn't contact her often during college years; however, in our recent meetings, she told me that she was unhappy most of the time in

**Comment [u5]:** "Me" information is not directly relevant here. And the implication of NTU may need to be spelled out

her department and that she was not suitable for studying law. She managed to make it through her classes but she wasn't sure what she was doing in life. She confessed to me that, if she had the chance to go back, she would not choose law school even though her high score matched the rigorous requirement for that department. After that meeting, she decided to quit her pursue for becoming a lawyer. Now she is in Taipei Normal University, attending the graduate school for Translation.

If we could change the college arrangement for most of the colleges in Taiwan, I believe there would be less people suffering from confusion in their college lives. Also, the first year in colleges will not only be a chance for freshmen to "play to their heart's contend," but a crucial year to take every single class seriously and figure out what they want!

**Comment [u6]:** Could be made more specific and tied to the prompt

### Comments Demonstrated by the Instructor (with notes appended as shown above)

| *Criteria* | *Done Well* | *Need Improvement* |
|---|---|---|
| Holistic | It addresses the topic and task. | The essay could be more focused. |
| Argument | It expresses a clear position with enough support. | Paragraph 2 does not seem to be directly relevant to the topic. |
| Organization | It is well organized and well developed. | Support of the main argument could be merged with the previous body paragraph, making a 3-paragraph essay. |
| Lexical Use | The language demonstrates appropriate word choice and lexical expressions. | There are minor spelling errors. |
| Grammar | It demonstrates syntactic variety and few grammatical errors. | There are few minor grammatical problems. |

### Sample Essay Revised based on Comments

For most freshmen in Taiwan, the definition of "university" is "play to your heart's content for four years." They worked extremely hard in high schools and tried their best to get the highest scores in College Entrance Exam. Finally, most chose their majors according to their score. If we ask any freshman, "why you chose your major?" 8 out of 10 might answer, "I don't know, by coincidence maybe, because this is the best possible department I could enter with my score." To decide on one's major merely by "coincidence," seems to be ridiculously wrong and lack of prudence. Therefore, I strongly disapprove the idea of forcing students to choose a major in their first year of college.

In Taiwan, students are trained to be "test-taking machines" since junior high. Always occupied by endless tests and tight schedules, they gradually get used to the monotonous daily routine, lacking the impetus to explore the world outside their classrooms. In this situation, the chance for them to find what they really want to do in the future is thin. What's worse, with a major pre-determined, these students do not have chance to find their real interest even after they go into colleges. Take my friend Hedy as an example. Hedy had always been quite successful academically since I knew her in elementary school. She kept her outstanding records all through junior high and was admitted into Taipei First Girls High School. She later got into the Law School in NTU, which has always ranked on the top in social sciences. In our recent

gatherings, she told me that she was unhappy most of the time in her department and that studying law did not interest her. She managed to make it through her classes but she wasn't sure what she was doing in life. She confessed to me that, if she had a second chance, she would not choose law school even though her high score met the rigorous requirement for that department.

If we could allow students to carefully consider and choose their majors after they enter college, I believe there would be fewer people suffering from confusion in college. Also, the first year in college will not only be a chance for freshmen to "play to their heart's content," but a crucial year to take every single class seriously and figure out what they want!

## APPENDIX D: REVISION WORKSHEETS FOR THE THREE GROUPS

### The Control Group

Now you have revised your draft, please copy results from previous peer review and enter your own assessment based on our rubrics.

| *Peer Assessment on Draft* | | | *Self Assessment on* | |
|---|---|---|---|---|
| Peer 1 | Peer 2 | Peer 3 | Draft | Revision |

In retrospect, these are the things I did in revising my draft.

| I tried to... | I accomplished it. ✓ |
|---|---|

...

### The Goal Group

Before you start to revise your draft, please circle one or more items from below to decide what you would like to focus on when your revise.

**Revision Goals**: Holistic/Argumentation/Organization/Lexical Use/Grammar

Once you have made your decision, list the things you would like to do to improve your draft. Check each item on the right with a ✓ (done) or x (not done) after you have finished the revision work.

| Things I would do to improve my draft | Check |
|---|---|

...

### The Goal + Group

Before you start to revise your draft, please circle one or more items from below to decide what you would like to focus on when your revise.

**Revision Goals**: Holistic/Argumentation/Organization/Lexical Use/Grammar

Once you have made your decision, list the things you would like to do to improve your draft. Check each item on the right with a ✓ (done) or x (not done) after you have finished the revision

work. **A list of revision strategies as have been discussed in class is appended in the end for your reference**.

| Things I would do to improve my draft | Check |
|---|---|
| | |

| *Revision strategies* | *Specific steps you may take* |
|---|---|
| To find general problems and areas for improvement | Read the essay out loud from the beginning to the end. Underline areas that may be problematic or could be improved. Summarize content into main points. |
| To fix topic sentences and main ideas | Check to see if topic sentences for body paragraphs are directly relevant to the prompt and represent their paragraphs appropriately. If not, restate your topic sentences by adding, deleting, substituting words and expressions. |
| To strengthen arguments | Reread to see if you are convinced by yourself. If not, reflect upon peer discussion and personal experiences to adjust your points of argument. |
| To ensure a clear beginning and conclusion | Check the beginning and concluding paragraphs. Make sure the beginning paragraph introduces your reader nicely into the thesis and the concluding paragraph restates your thesis without new information. |
| To ensure clear transitions | Check to see if paragraphs are hung together by appropriate transitional words and if ideas move smoothly from one paragraph to another. If not, consult the connector table, choose expressions to signal relations between paragraphs. |
| To eliminate mistakes in word usage | Check to see if the words and expressions used convey your messages clearly. If not, consult a dictionary to get the right words and phrases. |
| To eliminate mistakes in grammar and mechanics | Examine the draft for problems with grammar, sentence structure, and punctuation. Correct any spotted mistakes. |