

Self-Regulation and Approaches to Learning in English Composition Writing

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Abstract

It is hypothesized in the present study that when learners are tasked to write a composition in a second language (such as English language for Filipinos), they use specific approaches to learning and eventually undergo self-regulatory processes. The present study tested a model showing the shift from process to outcome in writing (Zimmerman & Kitsantas, 1999) by assessing the path from approaches to learning to self-regulation (using path analysis) as used in composition writing in English. The Academic Self-Regulated Learning Scale (A-SRL-S) and the Revised-Learning Process Questionnaire (R-LPQ-2F) were administered to 294 college students major in English, communication arts, literature, mass communications, and journalism from different universities in Manila, Philippines. The results showed that: (1) Deep approach significantly correlated with the factors of self-regulation except for environmental structuring and seeking assistance while surface approach did not, (2) deep approach and surface approach was also significantly correlated, and (3) deep approach significantly increased the variance in all self-regulation components while surface approach only increased the variance in memory strategy. Further theoretical implications of the path model were explained.

Introduction

Individuals use a variety of learning strategies and approaches when they engage in a writing task. Such learning strategies used in writing are planning, idea-generating, self-evaluating, self-monitoring, and reflecting. When individuals start to write essays and other English discourses, they also engage in deep approaches to learning. Writers understand deeply what they are writing about, whether the task caters to their interest, seek further information, become motivated about the content, plan and organize their thoughts. This shows that strategies and approaches to learning are simultaneously used when engaging in writing tasks (Lienemann & Reid, 2008). Deep approach to learning is used in the composing or writing process. Deep approach to learning is adopted by the student according to the kind of learning task engaged in (Marton & Saljo, 1976a). If the learning task is writing, writers perceive the task requiring organization of thoughts and planning. In the same way, when self-regulation is used in composition writing, specific strategies are used in the writing process. There is simultaneous interplay of the learning

approaches and self-regulation in the writing process (Evans, Kirby, & Fabrigar, 2003). The use of learning strategies becomes more evident when a second language is used to as a medium (Cummins, Kintsch, Reusser, & Weimer, 1988; Magno, 2009a; Stern, 1993).

Composition writing in English is a good context to study the relationship between self-regulation and learning approach because the specific approaches and strategies in learning are made apparent. Choosing composition writing as the context in the study is based on the following reasons: (1) The components of self-regulation and approach to learning are manifested in the composition process (Hayes, Hayes, & Hayes, 1981; Kellogg, & Raulerson, 2007; Olive, 2004). (2) The process in composition writing goes along with the self-regulation and approach to learning processes (Lienenmann & Reid, 2008; Plata, 2008; Pugalee, 2001). (3) Writing in a second language such as English makes the individual exert effort in the use of cognitive strategies such as self-regulation and approaches to learning (Marton & Saljo, 1976b; Kellogg, 2001; Hayes, Hayes, & Hayes, 1981; Kellogg & Raulerson 2007). The present study investigated the relationship between self-regulation components and learning approaches in the context of English composition writing.

Approaches to learning are composed of deep and surface approach to learning (Kember, Biggs, & Leung, 2004). Deep approach was defined as the approach wherein the students actively and mentally engage their selves with the study material. Deep approach is supposed to be the result of intrinsic motivation, self-regulation and awareness of one's learning capacity. Deep approach is the intention to extract meaning, produces active learning processes (relating ideas, seeking patterns, etc) and monitoring the development of one's own understanding. Self monitoring is one of the keys to undergoing a self regulatory process due to the motivation to accomplish the goal that is set by the learner mainly about gaining deep understanding of the learning task. Deep approach favors western learners. They attribute success with ability and effort, they are not only interested in the learning task but they are interested in learning it well (Baugmart & Halse, 1999). On the other hand, surface approach involves memorization of the material that doesn't require understanding like memorizing a poem for instance. Surface approach is said to be the product of specific situational demands for learning tasks that brings about great pressure to the students. Students see this approach as a useful approach to surpass that anxiety. Surface approach is said to be more expected when the student is experiencing anxiety and due to a heavy work load. It is also present when reproducing information rewarded due to the result of the ways of assessment (Ramsden & Entwistle, 1981). The intention is the completion of the task, no intrinsic motivation is seen from the participants it is purely external and usually requires no high level of understanding such as routine memorization (Entwistle, McCune, & Walker, 2001). Surface approach favors learning of students mostly from Asian cultures. They are seen as compliant and they favor rote memorization. Though they are being perceived as such, they still manage to be successful and they attribute success with effort and not ability (Baumgart & Halse, 1999). Asians view surface approach to be functional in their learning because it brings about positive consequences for them (Magno, 2009b).

The specific subscales under deep approach include: (1) Intrinsic interest - this is the interest that is shown by an individual to a particular subject area such as love for literature; (2) Commitment to work - since there is interest students now become prepared to work on their studies, so this is sort of like the result of intrinsic interest. (3) Relating ideas - integrating ideas that an individual learns from the subject areas and recalling previous knowledge from past subjects that are related to the material being learned. (4) Understanding - this is the one that creates the distinction between surface and deep approach (Kember, Biggs, & Leung, 1999).

Surface approach includes: (1) Fear of failure - an individual's fear of not being able to complete the task or to complete the task but fear of humiliation for failing afterwards; (2) Aim for qualifications - extrinsic motivation plays a role, for example, the purpose of the task is to add value to a resume; (3) Minimizing the scope of the study- selective learning, cutting down all unnecessary details and going straight to the point. This may be an advantage for some but can also be a disadvantage. Individuals will decrease workload to decrease stress however they might be pushing away some opportunities for learning new material; (4) Memorization- Lowest form of thinking, purely recall and no understanding required (Kember, Biggs, & Leung, 1999).

Several studies distinguished deep approach with surface approach where deep approach positively correlated with academic tasks (August-Brady, 2005; Chun-Heung & French, 1997; Guthrie, Wigfield, & VonSecker, 2000). The present study includes Asian learners, most particularly Filipinos. A different pattern in the consequence of deep and surface approach was found among Asian Learners. The study by Bernardo (2003) about learning approaches and academic achievement of Filipino learners showed that surface motives and surface strategies highly loaded among low achieving students. In the same way, the study by Baumgart and Halse (1999) showed that the Asian samples favored surface approaches characterized by their deviation from independent thought and action. More recently, the study of Magno (2009b) showed that both surface and deep approach to learning increases the use of metacognitive strategies that reflects regulation of cognition. Watkins and Biggs (1996) explained that the effects of surface and deep approach serve as a misconception of Westerners in their view of Asians. Asians were perceived as rote learners where they only use surface approach to learning. These studies neglect a more functional view that Asian learners about surface approach as a functional approach to learning.

A person who is self-regulated is characterized to be an active problem solver and aims to improve his/her performance given their abilities. Individuals who self-regulate achieve tasks successfully because they make attempts to close the gap between their current status and goals (Leventhal & Cameron, 1987). According to Zimmerman (1986) self-regulation focuses on how students personally activate, alter, and sustain their learning practices in specific context. Self-regulation was applied in different contexts such as health, performance, sports, and academic setting.

There are several studies where self-regulation was applied in a specific context or made domain specific such as in language acquisition. Previous studies have identified self-regulation as a useful strategy to acquire and become proficient in a foreign language (Graham & Harris, 1994; Zimmerman & Risemberg, 1997). Aside from language acquisition, it is also useful in the process of writing.

Zimmerman and Kitsantas (1999) explained that writing competencies are sourced from social aspects such as writers that serve as models, teachers, and guidelines in proper writing. This shapes the role of the social cognitive theory in explaining the use of self-regulation skills in writing. In the said theory, writing competencies are first learned from models and then individuals start to write on their own through observation. Then what has been observed is emulated by the individual by acquiring and adopting the pattern and style of the model. The observation and emulation process in writing was studied by Zimmerman and Kitsantas (2002) and they found that students improved their writing techniques using the two strategies. As the student writer progress, they develop their own strategies in writing such as planning and self-monitoring which is already a stage of self-control. When the writer can adapt his/her own strategies according to some requirements such as changing tasks, audience, and intrapersonal states, they become self-regulated. Each stage in the writing composition stage requires the individual to be motivated in the task and processes as well as specific self-regulation components such as memory strategy, goal-setting, self-evaluation, seeking assistance, environmental structuring, responsibility, and organizing. These components of self-regulation that can be useful in any task such as writing were identified in the studies of Zimmerman and Martinez-Pons (1986; 1988; 1990).

Self-regulation in writing was demonstrated in the study of Zimmerman and Kitsantas (1999) where the participants who shifted in their writing revision activity from process to outcome goals were better than the participants who focused on outcome goals in their writing revision skill, self-reactions, self-efficacy perceptions, and intrinsic interest. Zimmerman and Kitsantas (1997) in their previous study found that shifting goals from process to outcome among learners had better results in their performance. The self-regulated strategy of shifting learning processes and strategies to outcomes makes the consequences of learning more positive. This indicates a direction in the writing composition activity that individuals who start with an effective process is matched with a better outcome. This theory suggests that learning approaches as processes can be used to help writers become self-regulated. This notion is further supported by the study of August-Brady (2005) where deep approach to learning and self-regulation both increased when a metacognitive activity (concept mapping) was introduced among participants. The analysis also showed that these two variables are covariates to each other given the effect of metacognition. The similar effects on deep approach and self-regulated learning suggest collinearity of these two variables which supports the hypothesis of their positive relationship. However, surface approach also increased as an effect of the metacognition task and it is also positively related to adaptive control beliefs which is a measure of self-regulation.

The flow from process to outcome is apparent in composition writing in English. There are several reviews indicating a host of process to outcome shift or from approach to learning to self-regulation. Lenski (1998) showed that writing involves planning, translating, executing, evaluating, and revising. The steps on planning, translating, and executing reflects approach to learning since it involves generating ideas, converting ideas into words, and writing the content. The self-regulation part is shown in the evaluation and revision where the writer judges what he/she thought about and correcting the inadequacy in the work. In the same way,

the study by Kellog and Raulerson (2007) explained that in order to achieve higher levels of writing performance (self-regulation), the working memory demands of writing processes should be reduced so the executive attention is free to coordinate interactions among them (approach to learning). This theory can be achieved through deliberate practice that train writers to develop executive control through repeated opportunities to write and by timely and relevant feedbacks.

Writing well in a second language would require more and higher cognitive skills to be able to write well. Kellog (2001) explained that the process would involve a test of a person's memory, language repertoire and thinking ability all at once. He further explains that it demands rapid retrieval of domain-specific knowledge about the topic from the long-term memory. This process mainly starts by understanding the topic to write about and processing it to be translated in the second language then translate this knowledge to become words. The framework of Kellog (2001) also indicates the same direction of approach to learning to self-regulation. Before the writing task is regulated through strategies, the writer needs to have a deep understanding of the conceptualization of what to write about. The present study would like to establish the direction of learning approach to self-regulation in the context of composition writing in English. Specifically, a path model showing the effect of deep and surface approach on each seven self-regulation components is tested.

Method

Research Design

A cross-sectional explanatory design was used in the present study. The study aims to test the theory showing the direction of approach to learning to self-regulation as it operates in a domain specific context of composition writing in English. The design is also cross-sectional because the questionnaires were administered to the participants at a single point in time (see Johnson, 2001).

Participants

The participants in the study were 294 college students major in English, Linguistics, Literature, and Communication Arts. These participants are college level students from different schools in Metropolitan Manila offering courses on English, Linguistics, Literature, and Communication Arts. The courses deal with several activities involving composition writing in English. The age bracket of the participants was from 18 -21 years. The criteria for inclusion in the sample includes taking the above courses namely English, Linguistics, Literature, and Communication arts and who are under 18-21 years of age. All of the participants should have written essays, research papers, or is currently working on their thesis and action papers within college.

Instruments

The Revised Learning Process Questionnaire-Two Factorial (R-LPQ-2F). The R-LPQ-2F was developed by Kember, Biggs, and Leung (2004) that measures

multidimensionality of approaches to learning. This is a twenty two item questionnaire that concerns one's deep and surface learning approach scores. There are 11 items for deep approach and 11 for surface approach. It is a five point Lickert scale ranging from always or almost always true of me to never or rarely only true for me. Its construct validity has been tested with adequate goodness of fit values of CFI=0.804 and SRMR of 0.049. The revised learning process questionnaire was revised through changing the sentences to fit writing and not studying alone.

Academic Self-regulated Learning Scale (A-SRL-S). The A-SRL-S was derived by Magno (2009c) based on the model of Zimmerman and Martinez-Pons (1986; 1988). This is a 55 item questionnaire that measures students' academic self-regulation under seven subscales: Memory strategy, goal-setting, self-evaluation, seeking assistance, environmental structuring, responsibility, and organizing. The instruction to answer the items was modified to reflect activities on composition writing in English. The participants before answering were asked to think about their experiences in writing before, during, and after creating any form of English composition. The subscales of the A-SRL-S was confirmed in a measurement model with good fit ($RMR=.02$, $GFI=.94$, $CFI=.91$) with high internal consistencies. Convergent validity was established where the factors memory strategy, goal setting, and self-evaluation, seeking assistance, environmental structuring, organizing and responsibility increase significantly with each other.

Procedure

The *R-LPQ-2F* and A-SRL-S were administered to college students in Metro Manila that offer English, Linguistics, Literature, and Communication arts courses. The participants were asked first if they have composed any research paper, essays, or any form of written work before giving the set of questionnaires. In the instructions, it was emphasized that in answering the items, they need to think about their experiences before, during, and after engaging in a composition writing activity in English. After the participants completed the questionnaires, they were thanked and debriefed about the purpose of the study.

Data Analysis

All of the means and standard deviations for the Academic Self-Regulated Learning Scale (A-SRL-S) and Revised Learning Process Questionnaire Two Factorial (R-LPQ-2f) were calculated. The factors of self-regulation and learning approach were correlated to determine if they significantly increase with each other, this was done using the Pearson r .

Path analysis was used to test the path from the two factors of approach to learning (deep and surface) to the seven components of self-regulation. The goodness of fit of the model was indicated using the chi-square (χ^2), discrepancy function (χ^2/df), Root Mean Square Error Approximation (*RMSEA*), Goodness of Fit Index (*GFI*), and Adjust *GFI* (*AGFI*).

Result

Descriptive statistics of the two variables, self-regulation and learning approach were reported and correlations of self-regulation factors and learning approach were conducted using Pearson r .

Table 1
Means and Standard Deviation of Self-regulation and Learning Approach

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's alpha</i>
Deep Approach	294	2.41	0.28	.78
Surface Approach	294	2.39	0.25	.52
Memory Strategy	294	3.34	0.16	.82
Goal-setting	294	3.3	0.27	.91
Self-evaluation	294	3.28	0.17	.90
Seeking Assistance	294	3.26	0.23	.90
Environmental Structuring	294	3.31	0.28	.89
Responsibility	294	3.31	0.26	.92
Organizing	294	3.3	0.25	.91

The Mean score for 294 participants was obtained for deep approach and resulted in 2.41 and standard deviation of 0.28 which indicated that the scores obtained were near to each other. The mean score for surface approach resulted in 2.39 and a standard deviation of 0.25. Memory strategy scored the highest among the factors of self-regulation. The factors of self-regulation showed high internal consistencies. Adequate internal consistency was also found for deep approach but not for surface approach to learning.

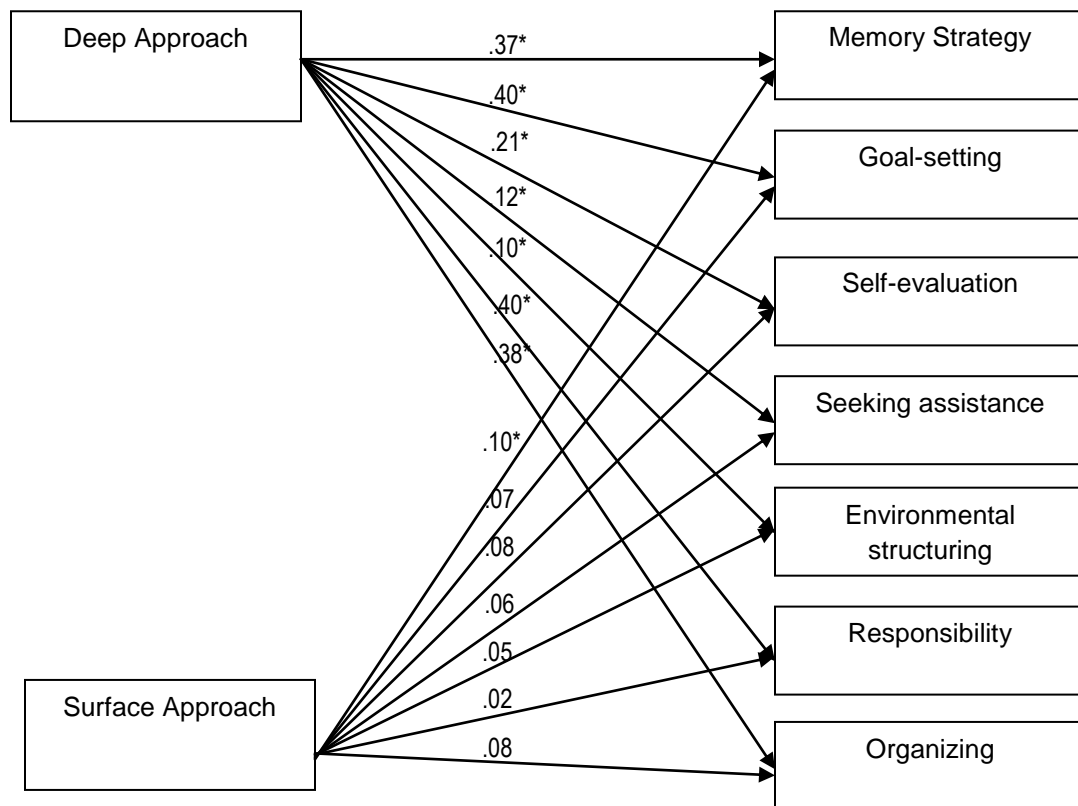
Table 2
Correlations among Factors of Self-regulation and Learning Approach

	1	2	3	4	5	6	7	8	9
(1) Deep Approach	--								
(2) Surface Approach	.11*	--							
(3) Memory Strategy	.13*	.08	--						
(4) Goal-setting	.14*	-.03	.19*	--					
(5) Self-evaluation	.11*	.05	.80*	.8*	--				
(6) Seeking Assistance	-.02	.02	.20*	.19*	.7*	--			
(7) Environmental Structuring	-.03	-.05	.71*	.43*	.54*	.34*	--		
(8) Responsibility	.16*	.01	.63*	.16*	.2*	.18*	.8*	--	
(9) Organizing	.15*	-.05	.50*	.42*	.84*	.32*	.16*	.13*	--

* $p < .05$

The self-regulation factors correlated significantly with deep approach to learning except for environmental structuring and seeking assistance. The self-regulation factors were not significantly related to surface approach. The relationship among the factors of self-regulation to deep approach, although significant, were low to moderate with values .13 for memory strategy, .14 for goal setting, .11 for self-evaluation, .16 for responsibility and .15 for organizing and non-significant coefficients of -.02 for seeking assistance and -.03 and environmental structuring. All of the factors deep approach to learning did not have high correlation with self-regulation. In addition, self-regulation factors were all significantly correlated with each other. Deep approach and surface approach to learning were also significantly correlated with each other with a .11 correlation.

Figure 1
Path Model from Approaches to Learning to Self-regulation



When the path model was tested where both deep and surface approach directly affects each of the seven factors of self-regulation. The results showed that deep approach significantly increase the variance in all self-regulation strategies. Surface approach only significantly increased the variance for memory strategy. The goodness of fit of the model was adequate ($\chi^2=90.2$, $\chi^2/df=2$, $RMSEA=.01$,

GFI=.94, Adjust *GFI=.93*). This means that the observations represent well the path model.

Discussion

The present study tested the shift from process to outcome as a strategy in writing by assessing the effect of approaches to learning on eight components of self-regulation. When the relationship between learning approaches and self-regulation was established, deep approach to learning significantly correlated to almost all components of self-regulation except for seeking assistance and environmental structuring. Surface approach consistently did not show any significant relationship with any of the components of self-regulation. However, when surface approach was correlated with deep approach, a positive direction was observed. The results of the path analysis is likely similar with the pattern of correlations. Deep approach to learning significantly increased all components of self-regulation. However, surface approach significantly increased memory strategy but not on other components. The difference in the effect of deep and surface approach is consistent with previous studies (Cantwell & Moore, 1996; Evan, Kirby, & Fabrigar, 2003; Winne, 1995).

The correlations indicate that surface approach did not correlate to any of the self-regulation components, but in the path model surface approach significantly increased memory strategies. Surface approach requires routine memorization and this entails the individual to use memory strategies. This direction showing routine memorization coupled with memorization strategy is described as a complementary match. This complementary match is appropriate because when the approach to memorize is at hand, the individual utilizes a complement strategy which is to memorize better. This describes the functionality of surface approach to learning especially when contextualized among Asians and writing in a second language. Rote memorization is useful when the outcome requires rote memorization as shown by the results. However, if the outcome does not require the rote memorization such in the case of other self-regulation strategies, then surface approach cannot be translated.

The results of the correlations showing the deep approach having no relationship with seeking assistance and environmental structuring shows the limitation of deep approach to learning as a process to translated into self-regulation outcomes. However, in the path model, the effect of deep approach to learning on all factors of self-regulation was significant but low path estimates for seeking assistance and environmental structuring. Environmental structuring and seeking assistance are strategies that require the manipulation of an external agent in order to be self-regulated as compared to other factors which are more intrinsic in nature allowing a divergent effect of deep approach to the components of self-regulation. This pattern indicates two things, first is the possible differences in the components of self-regulation and second, the effectiveness of deep approach on self-regulation. In the first account, different components of self-regulation behave differently when affected by a process variable such as deep approach to learning when contextualized into a writing composition activity. Previous studies also indicate differences in pattern of self-regulation components as affected by exogenous variables (ex. August-Brady, 2005; Evans, Kirby, & Fabrigar, 2003). The differing

effects of deep approach to learning on self-regulation can also explain in the domain-specificity of the task. In the present study, the responses to the measures are contextualized in composition writing in English where individuals translate process approach to effective outcomes such as self-regulation exhibiting a pattern. The writing activity as explained by Zimmerman and Kitsantas (1999) needs independent thinking and self-discipline which might not require too much help from others (seeking assistance). On the other hand, the writing activity may not require a too much manipulation of the environment as in the case of environmental structuring because the writer focuses on the task of writing rather than on the environment. The effectiveness of deep approach to learning may also explain the pattern of outcome for the components of self-regulation. Deep approach to learning when used does not turn out to be consistently effective for different ways of regulating the composition writing task. Deep approach may be effective for majority of the self-regulation aspects but weak in the translation on seeking assistance and environmental structuring. These self-regulation components may not require much of deep approach to learning such as intrinsic interest, commitment to work, and understanding.

Previous studies explain that surface approach have a different pattern among Asian learners where it is viewed to be functional (Baumgart & Halse, 1999; Bernardo, 2003; Magno, 2009b) and this was supported in the presented study because of the increase of deep approach with surface approach when they are correlated. The results in the study further clarify both the relationship of deep and surface and their effects on other factors such as self-regulation. It should be clearly noted that deep and surface approach increase together making both a functional approach but their effects on self-regulation are not the same. Learners may view these two approaches to be useful and relevant in the same way but their consequences are different. In the context of writing composition in English, the writer makes use of both deep and surface approach but the deep approach is a more powerful process that projects beneficial outcomes of being self-regulated. This means that when individuals start to write, all approaches when used as a process are functional such as high interest in a topic and at the same time being worried of not being able to do well in writing. Although in the consequence, individuals who have higher interest on the topic written are more able to use effective strategies that facilitate their writing process. On the other hand, being worried of not being able to write well could not resort to better strategies in writing.

The present findings further clarify more specific patterns for deep and surface approach especially when contextualized in a composition writing activity in English. It should be made clear that there is similarity in the function and usefulness of both deep and surface approaches in writing but their consequences are not. Previous findings about the divergent effects of deep and surface approach is limited in characterizing the concepts but the present study was able to show that their functionality and usefulness is distinct as to their consequences. This new pattern is made possible when a task involves writing as a function of a second language especially among Asian learners. Having conditions such as task and language making approaches to learning and self-regulation domain-specific finely show better patterns.

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Appendix A
Revised Learning Process Questionnaire (Adapted for Writing Task)

Deep approach (DA)

Deep motive (DM)

Intrinsic interest

I find that at times writing makes me feel really happy and satisfied.

I feel that nearly any topic can be highly interesting to write once I get into it.

I work hard at my compositions because I find the material interesting.

Commitment to work

I spend a lot of my free time finding out more about interesting topics which have been discussed in different classes. (13)

I try to write about things with questions in mind that I want answering.

I find I am continually going over my composition in my mind at times like when I am on the bus, walking, or lying in bed, and so on.

I like to do enough compositions on a topic so that I can form my own conclusions before I am satisfied.

Deep strategy (DS)

Relating ideas

I try to write about what I have learned in one subject relating to what I learn in other subjects. (2)

I like constructing theories by odd things together and write about it.

Understanding

I try to relate new material, as I am writing about it, to what I already know on that topic. (10)

When I write a composition, I try to understand what I mainly want to say. (14)

Surface Approach (SA)

Surface motive (SM)

Fear of failure

I am discouraged by a poor mark on my written work and worry about how I will do on the next writing activity.

Even when I work hard for an essay, I worry that I may not be able to do well in it.

Aim for qualification

Whether I like it or not, I can see that developing my writing skills is a good way to get a well-paid job.

I intend to get my high grades in my research reports because I feel that I will then be able to get a better job.

Surface strategy (SS)

Minimizing scope of study

I see no point in writing a material which is not likely to be graded by the teacher.

As long as I feel I am doing enough to pass my written compositions, I devote as little time to writing as I can. There are many more interesting things to do.

I generally restrict my writing to what is specifically set as I think it is unnecessary to do anything extra.

I find it is not helpful to write about topics in depth. You don't really need to know much in order to get by in most topics.

Memorization

I find it useful in writing to learn some things by rote, going over and over them until I know them by heart.

I find the best way to write is to try to remember unique words as much as possible.

I find I can get by in most assessment of my research reports by memorizing key sections from sources rather than trying to understand them.

Appendix B

Academic Self-regulated Learning Scale (Adapted for Writing Task)

Answer each item by first thinking about what you do before, during and after writing any reports, essays, and research.

Memory Strategy

I use note cards to write information I need to remember
 I make lists of related information by categories.
 I rewrite class notes by rearranging the information in my own words
 I use graphic organizers to put abstract information into a concrete form.
 I represent concepts with symbols such as drawings so I can easily remember them.
 I make a summary of my readings.
 I make outlines as guides while I am studying.
 I summarize every topic we would have in class.
 I visualize words in my mind to recall terms
 I recite the answers to questions on the topic that I made up.
 I record the lessons that I attend to.
 I make sample questions from a topic and answer them.
 I recite my notes while studying for an exam.
 I write messages for myself to remind me of my homework.

Goal-setting

I make a detailed schedule of my daily activities.
 I make a timetable of all the activities I have to complete
 I plan the things I have to do in a week.
 I use a planner to keep track of what I am supposed to accomplish
 I keep track of everything I have to do in a notebook or on a calendar

Self-evaluation

If I am having a difficulty, I inquire assistance from an expert.
 I welcome peer evaluations for every output.
 I evaluate my accomplishments at the end of each study session.
 I ask others how my work is before passing it to my professors
 I take note of the improvements on what I do.
 I monitor my improvements in doing certain task.
 I ask feedback of my performance from someone who is more capable
 I listen attentively to people who comment on my work
 I am open to feedbacks to improve my work.
 I browse through my past outputs to see my progress.
 I ask others what changes should be done with my homework, papers, etc
 I am open to changes based from the feedbacks I received.

Seeking Assistance

I use a variety of sources in making my research papers.
 I use library resources to find the information that I need.
 I take my own notes in class.
 I enjoy group works because we help one another.
 I call a classmate about the homework that I missed.
 I look for a friend whom I can have an exchange of questions
 I study with a partner to compare notes.

I explain to my peers what I have learned.

Environmental structuring

I avoid watching the television if I have a pending a homework.
 I isolate myself from unnecessary noisy places
 I don't want to hear a single sound when I'm studying.
 I can't study nor do my homework if the room is dark.
 I switch off my TV for me to concentrate on my studies.

Responsibility

I recheck my homework if I have done it correctly before passing
 I do things as soon as the teacher gives the task
 I am concerned with the deadlines set by the teachers
 I prioritize my schoolwork over other activities
 I finish all my homework first before doing unnecessary things.

Organizing

I highlight important concepts and information I find in my readings
 I picture in my mind how the test will look like based on previous tests
 I put my past notebooks, handouts, and the like in a certain container
 I study at my own pace.
 I fix my things first before I start studying
 I make sure my study area is clean before studying.

Author Notes

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