

# Multiple Intelligences-Based Instructional Strategy of English Academic Writing Skill Instruction (MIB-IS of EAWSI): A Classroom Action Research at One of Indonesia Senior High School

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## **Abstract**

*This study is focused on the implementation of Multiple Intelligences-Based Instructional Strategy (MIB-IS) to improve students English Academic Writing Skill Instruction (EAWSI). It uses Classroom Action Research (CAR). There are four steps in this CAR: (1) plan, (2) action, (3) observation, and (4) reflection. Multiple Intelligences-Based Instructional Strategy (MIB-IS) can improve Senior High School students' academic writing (argumentative essay writing) in eight students' intelligences (linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist) following the writing process of creating, outlining, drafting, and polishing. The process of academic writing instruction through MIB-IS will be more effective if the students are able to be more active in following every single step of writing process to hit the big issues of content, organization, unity, coherence, logic and the smaller issues of grammar, sentence-structure, punctuation, and spelling. And by giving an academic writing exercise in every phase of instruction is really important to improve students' argumentative essay writing skill for students to master the concepts comprehensively and integrated properly. And so, the school as an educational institution must prepare its students to go to the university by the capability of supporting MIB-IS implementation in academic writing instruction as an effective English instructional strategy.*

## **Keywords**

*Multiple Intelligences-Based Instructional Strategy, English academic writing skill instruction*

## 1. Introduction

### 1.1 Rationale

The students of Senior High School can develop their intellectuality, social interaction, and emotion by mastering the English language. Besides that, they can also learn any other subjects by understanding the language. So that, the process of English instructional by any teachers at school is expected to make students able to apply their Multiple Intelligences (for instance, to understand themselves, to know their and other culture, to express their opinions and feeling, and to take a part in their internal and external community).

Politically, English is a second language in Indonesia and it has been taught to all students of Elementary School until of University. The government and people of Indonesia have realized that English is important for each next generation of the country in order to get remarkable knowledge easily and can compete in today globalization era. Studying English is one of requirements for someone to perform verbal and non-verbal communication (especially, written communication). For instance, in everyday communication, people need to exchange their thoughts, messages, and information as by speech, signals, writing, attitudes and behaviors for expanding their knowledge, technology, and culture. In other words, to communicate means to understand and produce spoken and written expression implemented in four language skills (listening, speaking, reading, and writing). That is why, the instruction of English must assist students in developing their language skills, in order they can communicate and express themselves in English in an assured literacy level (performative, functional, informational, and epistemic). In performative level, the student can listen, speak, read, and write by using symbols. In functional level, the student can use language skill for daily needs, e.g. reading newspaper, manual, magazine, and so on. In informational level, the student can access knowledge with language skill. And in epistemic level, the student can express knowledge into targeted language (Permendiknas Nomor 22 Tahun, 2006, p. 307).

The English Subject matter objectives for Senior High School are students need to have the capabilities of (1) developing verbal and written communication competency to reach the informational literacy level; (2) having awareness on the essence and importance of English to compete in today globalization era; and (3) developing students' understanding on the relationship between language and culture. This means that English instructional objectives in Senior High School is to prepare students to reach the informational literacy level in order they can access knowledge with language skills as they will continue their study to tertiary education (Standard Content of Curriculum 2006 for Senior High School in Indonesia).

Most students of Senior High School tend to be reluctant to write in English. They always think that writing in English is difficult, having a misconception on the usage of tenses, focusing on grammar excessively, and having poor vocabulary. And the other problem face by the students is the teacher role in the class. There are still teachers use no variations in teaching writing, so it results the students put less attention on writing. Writing well is one of the best ways we can communicate with one another

(Bridges & Lunsford, 1984, p. 2). Writing is a process of creating, organizing, writing, and polishing. In the process of creating, a student in creating ideas. In organizing process, a student recognizes the ideas. In writing process, a student writes a rough draft. And in the polishing process, a student polishes his/her draft by editing it and making revisions (Oshima & Hogue, 2006, p. 265).

Based on the students problems of learning English above, Senior High School teachers of English must really well prepared of their language skills, language instructional competency, good understanding on external factors (students' psychological aspect), need to consider briefly the sort of variables that apply in the teaching of young adults or teens, and high school-age children whose ages range between twelve an eighteen or so. The students cease to be a child at the age of puberty and that all of the rules of adult teaching suddenly apply. Therefore, a very special set of considerations applies to teaching them. That is why, some thoughts are worth verbalizing, even if in the form of simple reminders: (1) intellectual capacity adds abstract operational thought around the age of twelve; (2) attention spans are lengthening as a result of intellectual maturation, but once again, with many diversions present in a teenager's life, those potential attention spans can easily be shortened; (3) varieties of sensory input are still important, but, again, increasing; (4) capacities for abstraction lessen the essential nature of appealing to all five senses; (5) factors surrounding ego, self-image, and self-esteem are at their pinnacle; and (6) senior high school students are of course becoming increasingly adult like in their ability to make those occasional diversions from the here and now nature of immediate communicative context to dwell on a grammar point or vocabulary item (Brown, 2001, p. 92).

In the context of academic writing, a student is required to do in college or university after passed in Senior High School. Essay, papers, general subject reports, and compositions are kinds of academic writing. And so, there are four kinds of essay: narrative, comparison, cause-effect, and argumentative (Folse, 2004, pp. 1-2). Writing an essay is being a challenge to Senior High School students. And Indonesia still has a small number of productive writers who are able to broaden horizons of many people. This also became a challenge to English teachers in Indonesia. They need to work hard to help students to write good English. And they often face problem of how to teach good writing in English. Then, for the sake of effective instruction of a second language, English teachers must to develop language teaching methods. They can choose suitable instruction approach, method, or strategy in applying teaching English. So, it true that stated by Lin (2006): "The conventional, authoritative teacher-centered instruction has given way to the learner-centered mode of instruction. Educator started paying attention to the impact that learners' affective factors (e.g., their feelings, emotions, tensions, anxieties, frustration, confidences, and etc.) may bring in the process of learning".

In the past, intelligence was believed as fixed static entity at birth was defined operationally as the ability to answer items on the IQ test. According to Howard (2010), intelligence is the ability to handle a new situation and the ability to learn from the past experiences of somebody. Gardner stated that the schools and most of the cultures focus most of their attention on linguistic and logical-mathematical

intelligences ignore the other intelligences. The Multiple Intelligences suggest that the traditional notion of intelligence based on IQ testing is far too limited. He proposes eight different intelligences to account for broader range of human potentiality (in children and adults), they are: (1) linguistic intelligence (The ability to use language effectively both orally and in writing); (2) logical-mathematical intelligence (The ability to use numbers effectively and reason well); (3) visual or spatial intelligence (The ability to recognize form, space, color, line, shape and to graphically represent visual and spatial ideas); (4) bodily or kinesthetic intelligence (The ability to use the body to express ideas and feelings and to solve problems); (5) musical intelligence (The ability to recognize rhythm, pitch, and melody); (6) naturalist intelligence (The ability to recognize and classify plants, minerals, and animals); (7) interpersonal intelligence (The ability to understand another person's feelings, motivations, intentions, and to respond effectively); and (8) intrapersonal intelligence (The ability to know about and understand oneself and recognize one's similarities to and differences from others) (<http://www.howardgardner.com/MI/mi.html> Internet; retrieved December 9, 2014). Lin (2006) stated that the Gardner's multiple intelligence theory recognizes a broader intellectual spectrum in every single learner of English. So, today the English teachers realize the fact that the students bring with them specific strengths, unique learning styles, and different learning potentials (Retrieved December 9, 2014, from <http://www.highschool.English.nccu.edu.tw/paper/ying.doc>).

Based on the above rationale, it can be said that to teach writing, English teacher of Senior High School need to consider about the following: (1) a good instructional writing process is not only focusing on how the teacher teaches, but also drawing attention to how the students learn, so the objective of writing instruction will be easily achieved; (2) English teacher in Senior High School have got difficulties in the four language skills instruction, so the most important aspects to be considered are not only the instructional materials, but also an appropriate approach, method, or strategy to present the materials; (3) argumentative essay is a part of academic writing, besides papers, general subject reports, composition, academically technical reports, focused journals, etc.

There are four kinds of essay: narrative, comparison, cause-effect, and argumentative. Argumentative essay is chose as the academic writing test in every single action followed by the Senior High School students of SMA Negeri Tompaso Baru. The reason is, the school is preparing their students to continue their studies in tertiary education throughout the curriculum.

## *1.2 Conceptual Framework*

### *1.2.1 The Language Skill (LS)*

Learning English is not only for acquiring knowledge (grammar and pronunciation systems), but to learn the skills. The students need meaningful and interactive practice in the language skills in order to learn the language usage (Gower, Philips, & Walter, 2005, p. 85). The four language skills (listening, speaking, reading, and writing) are often divided into two types (receptive and productive skills). To read and listen means to extract meaning from the discourse and so as receptive skills. To speak and to write means to produce language, and so as productive skills. And the integration of the skills is often

happened in our real life. The language skills are generally integrated rather than occurring in isolation. For instance, if we are taking a part of a conversation, we both listen and speak. If we fill a form, it means that we read and write. And if we take note from a lecture, of course, we involve our skills of listening and writing. So, language skills are often integrated with one activity leading on to another (Harmer, 2007, p. 265).

### *1.3 The English Academic Writing Skill (EAWS)*

#### *1.3.1 The Nature of EAWS*

People generally learn to walk and talk, but to swim and write are specific matters to be learnt. People learn to swim if they have a swimming pool or a place where they can swim in, and of course, they learn to write if they are part of an academic community (Brown, 2001, p. 334). Writing is a process of discovering and shaping meaning. Implicit in this definition is that writing requires communicating that meaning to someone, whether this audience consists solely of the writer or is a group of someone beyond the writer. The need to communicate is one of humankind's dominant traits and writing well is one of the best ways we can communicate with one another (Bridges & Lunsford, 1984, p. 2). Writing is one of the best ways for communicating with others which has a unique mechanism. Writing is a process of creating, organizing, writing, and polishing. In the first step of the process a student creates ideas. In the second step, he/she recognizes the ideas. In the third step, he/she writes a rough draft. And in the final step, he/she polishes his/her rough draft by editing it and making revisions (Oshima & Hogue, 2006, p. 265).

There are more than fifty written language genres. They can be slightly shorter. The teacher should be aware of the surprising multiple of options of written genres that second language learners need to acquire. The language genres can be as follows: (1) academic writing (papers, general subject reports, essays, compositions, academically focused journals, short-answer test responses, and technical reports, e.g., lab reports); (2) job-related writing (messages, e.g., phone messages, letters or emails, memos, e.g., interoffice, reports, e.g., job evaluations and project reports, schedules labels, signs, advertisements, announcements, and manuals); (3) personal writing (letters, e-mails, greeting cards, invitations, messages, notes, calendar entries, shopping lists, reminders, financial documents, e.g., checks, tax forms, loan applications, forms, questionnaires, medical reports, immigration documents, diaries, personal journals, and fiction, e.g., short stories and poetry) (Brown, 2004, p. 219).

There are four categories of written performance. They are imitative, intensive or controlled, responsive, and extensive. Imitative means to produce written language. The learner must attain skills in the fundamental, basic tasks of writing letters, words, punctuation, and very brief sentences. Intensive or controlled means beyond the fundamentals of imitative writing are skills in producing appropriate vocabulary within a context, collocations and idioms, and correct grammatical features up to the length of a sentence. Responsive means that assessment tasks require learners to perform at a limited discourse level, connecting sentences into a paragraph and creating a logically connected sequence of two or three paragraphs. Tasks respond to pedagogical directives, list of criteria, outlines,

and other guidelines. Extensive writing implies successful management of all the processes and strategies, up to the length of an essay, a term paper, a major research project report, or even a thesis (Brown, 2004, p. 220).

The earlier micro skills apply more appropriately to imitative and intensive types of writing task, while the macro skills are essential for the successful mastery of responsive and extensive writing. Micro skills are (1) produce graphemes and orthographic patterns of English; (2) produce writing at an efficient rate of speed to suit the purpose; (3) produce an acceptable core of words and use appropriate word order patterns; (4) use acceptable grammatical systems, e.g., tense, agreement, and pluralization, patterns, and rules; (5) express a particular meaning in different grammatical forms; and (6) use cohesive devices in written discourse. And then the macro skills are (1) use the rhetorical forms and conventions of written discourse; (2) appropriately accomplish the communicative functions of written texts according to form and purpose; (3) convey link and connections between events and communicate such relations as main idea, supporting idea, new information, given information, generalization, and exemplification; (4) distinguish between literal and implied meanings when writing; (5) correctly convey culturally specific references in the context of the written text; and (6) develop and use battery of writing strategies, such as accurately assessing the audience's interpretation, using prewriting devices, writing with fluency in the first drafts, using paraphrases and synonyms, soliciting peer and instructor feedback, and using feedback for revising and editing (Brown, 2004, p. 221).

### 1.3.2 The English Academic Writing Skill (EAWS) Process

English academic writing skill is the kind of writing that a student is required to do in college or university. It differs from other kinds of writing, such as personal literary, journalistic, and business writing. The differences can be explained in part by its particular audience (the people who will read what a writer has written), tone (writer's style or manner of expression), and the purpose of a piece of writing determines its organizational pattern.

Writing process is the stages a writer goes through in order to produce something in its final written form. This process may be affected by the content of the writing, the type of writing, and the medium it is written in. It has four elements (planning, drafting, editing, and final version). In the planning process, experienced writers plan what they are going to write. Before starting to write or type they try and decide what it is they are going to say. For more writers, this may involve making detailed notes. For others a few jotted words may be enough. Still others may not actually write down any preliminary notes at all since they may do all their planning in their heads. But they will have planned what is needed before writing it on the piece of paper.

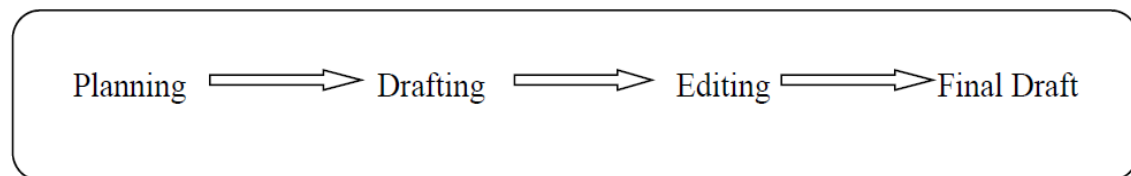
When planning, writers must think about three main issues. Firstly, they must consider the purpose of their writing since this will influence among other things not only the type of text they wish to produce but also the language they use and the information they choose to include. Secondly, experienced writers think of the audience are writing for since this will influence not only the shape of the writing but also the choice of language whether for example, it is formal or informal in tone. Thirdly, writers

must consider the content structures of this piece that is how to sequence the facts, ideas, and arguments which they must be decided to include.

A writer can refer to the first version of a piece of writing as a draft. This goes at a text if often done on the assumption that it will be amended later. As the writing process proceeds into editing, a number of drafts may be produced on the way to the final version. Once writers have produced a draft they then usually read through what they have written to see where it works and where it doesn't. Perhaps the order of the information is not clear. Perhaps the way something is written is ambiguous or confusing. They may then move paragraphs around or write a new introduction. They may use a different form of words for a particular sentence. More skilled writers tend to look at issues of general meaning and overall structure before concentrating on detailed features such as individual words and grammatical accuracy. The latter two are of course important and are often dealt with later in the process.

Editing or reflecting and revising are often helped by other readers who comment and make suggestions. Another reader's reaction to a piece of writing will help the author to make appropriate revision. Once writers have edited their drafts, making the changes, they consider to be necessary, they produce their final versions. This may look considerably different from the original plan and the first draft because things have changed in the editing process. But the writer is now ready to send the written text to its intended audience.

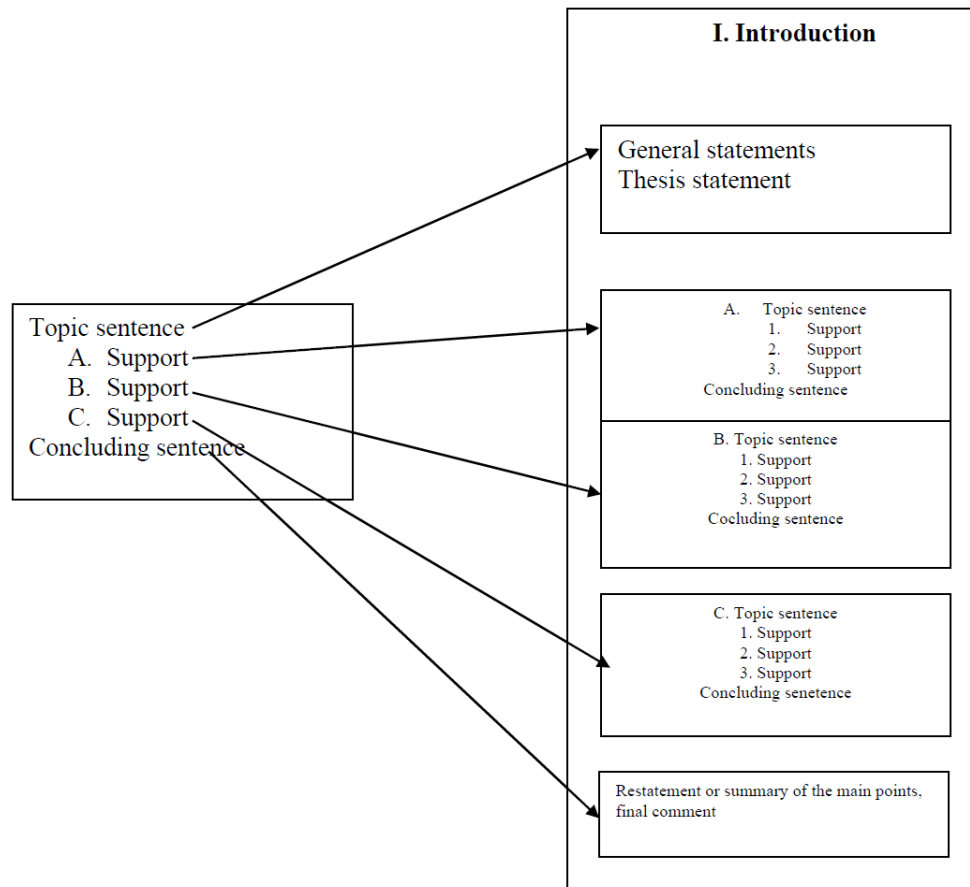
The following diagrams are illustrated of writing stages. The first diagram is not entirely satisfactory and the second diagram has the process reached its culmination. There are two reasons why the first diagram is not satisfactory. Firstly, it tells us little about how much weight is given to each stage, but more importantly, by suggesting that the process of writing is linear it misrepresents their way in which the majority of writers produce written text. The process of writing is not linear as indicated in the diagram, but rather than recursive. It means that writers plan, draft, and edit but then often replan, redraft, and reedit. Even when they get to what they think is their final draft, they may find themselves changing their mind and replanning, drafting, and editing. They may even start as some novelists do without too much plan, a kind of stream of consciousness that only later through a serious replanning, drafting, and editing gradually coalesces into a final version of the text.



**Figure 1. English Academic Writing Stages Illustration One**

An essay is a piece of writing several paragraphs that presents facts, opinions, and ideas on a topic. It is about one topic just as a paragraph is. However, because the topic of an essay is too complex to discuss in one paragraph, a writer needs to divide it into several paragraphs one for each major point.

Then he/she needs to tie the paragraphs together by adding an introduction a conclusion. An essay has three main parts: an introduction (introductory paragraph), a body (at least one, but usually two or more paragraphs), and a conclusion (concluding paragraph). The following chart shows how the parts of a paragraph correspond to the parts of an essay.



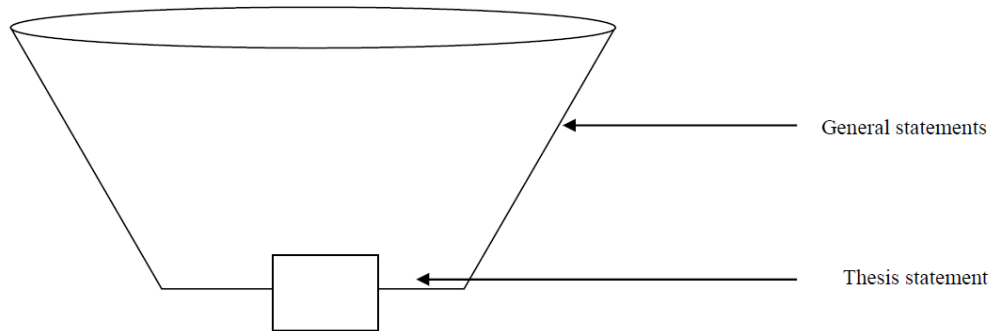
**Figure 2. Paragraph and Essay Illustration**

An essay introduction consists of two parts: a few general statements to attract the reader's attention and a thesis statement to state the main idea of the essay. A thesis statement for an essay is like topic sentence for a paragraph, it names the specific topic and gives the reader a general idea of the contents of the essay. The body consists of one or more paragraphs. Each paragraph develops a subdivision of the topic, so the number of paragraphs in the body will vary the number of subdivisions or subtopics. The conclusion like the concluding sentence in a paragraph is a summary or review of the main points discussed in the body (Oshima & Hogue, 2006, p. 57).

An introductory paragraph has two parts: general statement and thesis statement. The introductory paragraph of the model essay is an funnel introduction. This introduction is so called because it is shaped like a funnel-wide at top and narrow at the bottom. It begins with one or two very general sentences about the topic. Each subsequent sentence becomes increasingly focused on the topic until



the last sentence which states very specific what the essay will be about. Writing a funnel introduction is like focusing a camera with a telephoto lens. A writer starts with a wide picture and gradually narrows the focus so that just one object appears in the camera's viewfinder. This is the funnel-wide figure bellow.



**Figure 3. Introductory Paragraph Illustration**

The general statement consists of (1) introduce the general topic of the essay, and (2) capture the reader's interest. The thesis statement consists of (1) states the specific topic, (2) may list subtopics or subdivisions of the main topic or subtopics, (3) may indicate the pattern of organization of the essay, and (4) is normally the last sentence in the introductory paragraph. The body paragraph is an essay is like the supporting sentences in a paragraph. They are the place to develop your topic and prove your points. Writers should organize body paragraphs according to some sort of pattern such as chronological order or comparison/contrast. Sometimes, depending on writer's topic, they will need to use a combination of patterns.

A basic pattern of essay is logical division of ideas. In this pattern, writers divide topic into subtopics and then discuss each subtopic in a separate paragraph. Logical division is an appropriate pattern for explaining causes, reasons, types, kinds, qualities, methods, advantages, as these typical college exams. The conclusion is the final paragraph in an essay. It has three purposes: (1) it signal the end of the essay, (2) it reminds the reader of a writer's main points which he/she can do in one of two ways, a writer can summarize his/her subtopics and paraphrase his/her thesis, and (3) it leaves his/her reader with final thoughts on the topic. This is his/her opportunity to convey a strong effective message that his/her reader will remember (Oshima & Hogue, 2006, p. 60, p. 72). So, essay is a part of academic writing, besides papers, general report, and compositions, academically technical reports, focused journals, etc.

An argumentative essay is an essay in which one agrees or disagrees with an issue using reasons to support a writer's opinion. The writer's purpose is to persuade the reader of an opinion about something or the writer's goal is to convince his/her reader that his/her opinion is right. Argumentative essay is popular kind of essay question because it forces students to think on their own. They must take a stand on an issue, support their stand with solid reasons, and support their reasons with solid evidence

(Folse, 2004, p. 109). For instance, in the TOEFL exam test, a student might encounter questions as the following: (1) *The U.S. Declaration of Independence states that “all men are created equal”. Agree or disagree with this statement.* Support your opinion with reasons and examples; and (2) *The most important element in a friendship is trust. Agree or disagree with this statement.* Support your opinion with reasons and examples. So, what is unique about an argumentative essay is that a writer does not just give reasons to support his/her point of view, he/she must also discuss the other side’s reasons and then rebut them. Rebut means to point out problems with the other side’s reasons to prove that they are not good reasons. A writer does this because he/she wants readers to know that he/she has considered all sides of the issue. When he/she shows that he/she is reasonable and open-minded, readers are more likely to listen to his/her point of view (Oshima & Hogue, 2006, p. 143).

The organization of argumentative essay can be as in the Table 1 bellow (Oshima & Hogue, 2006, p. 316).

**Table 1. The Organization of English Argumentative Essay Writing Skill (EAEWS)**

<b>Block pattern</b>		<b>Point-by-point pattern</b>	
<b>I. Introduction</b>		<b>I. Introduction</b>	
Explanation of the issue		Explanation of the issue including a summary of the other side’s arguments	
Thesis statement		Thesis statement	
<b>II. Body</b>		<b>II. Body</b>	
<b>Block 1</b>		<b>Block 1</b>	
A. Summary of other side’s arguments		A. Statement of the other side’s first argument and rebuttal with write’s own counter argument	
B. Rebuttal to the first argument		B. Statement of the other side’s second argument and rebuttal with write’s own counter argument	
C. Rebuttal to the second argument		C. Statement of the other side’s third argument and rebuttal with writer’s own counter argument	
D. Rebuttal to the third argument			
<b>Block 2</b>			
E. Writer’s first argument			
F. Writer’s second argument			
G. Writer’s third argument			
<b>III. Conclusion</b>		<b>III. Conclusion</b> -may include a summary of writer’s point of view	

To evaluate an essay a teacher needs to consider some important parts of the essay need to be scored, i.e., format, mechanics, content, organization, and grammar and sentence structure. For the measurement of academic writing test can be as in the Tables 2 and 3 bellow (Oshima & Hogue, 2006, p. 316).

**Table 2. The Measurement of English Academic Writing Test**

<b>The Essay Components</b>	<b>Maximum score</b>	<b>Actual score</b>
<b>Format = 8 points</b>		
Title centered (2), first line of each paragraph indented (2), margins on both sides (2), text double-spaced (2)		
<b>Subtotal</b>	<b>8</b>	
<b>Mechanics = 7 points</b>		
Punctuation: periods, commas, semicolons, quotation marks (3), capitalization (2), spelling (2)		
<b>Subtotal</b>	<b>7</b>	
<b>Content = 20 points</b>		
The essay is an argumentative essay	5	
The essay is interesting to read	5	
The essay shows that the writer used care and thought	10	
<b>Subtotal</b>	<b>20</b>	
<b>Organization = 45 points</b>		
The essay follows the outline, and it has an introduction, a body, and a conclusion	5	
Introduction: the introduction ends with the thesis statement	5	
Body: each paragraph of the body discusses anew point and begins with a clear	5	
topic sentence;	10	
each paragraph has specific supporting material: fact, examples, quotations, paraphrased or summarized information, etc.;	5	
each paragraph has unity;	5	
each paragraph has coherence;	5	
transitions are used to link paragraphs.	5	
Conclusion: the conclusion summarizes the main points or paraphrases the thesis statement, begins with a conclusion signal, and leaves the reader with the writer's final thoughts on the topic.		
<b>Subtotal</b>	<b>45</b>	
<b>Grammar and sentence structure = 20 points</b>		
Estimates a grammar and sentence structure score	20	
<b>Subtotal</b>	<b>20</b>	
<b>Total</b>	<b>100</b>	

**Table 3. The Interpretation of the English Academic Writing Test Result**

No	Scores	Writing level
1	80-100	Excelent
2	70-79	Good
3	60-69	Adequate
4	40-59	Poor
5	< = 39	Unacceptable

#### *1.4 The Multiple Intelligence (MI) Theory*

##### *1.4.1 The Nature of MI*

Teachers of English as a foreign language (like in Indonesia) ask about the relationship between learning styles. Are they the same? For instance, they ask about perceptual learning styles (visual and kinesthetic is in almost the same terms as spatial and bodily-kinesthetic intelligence). Then, there are two people who want to develop their musical intelligence. The first person goes to the music store and buys several of his favorite cassettes. He takes them home, listens to them, and then tries to play what he hears. The second person goes to the music store and buy a sheet music. She takes the selections home, studies and reads the music, and then sits down to play. Both of these individuals are working to develop their musical intelligences, but they do it in different ways.

The preferred learning style for music for the first person is auditory; the preferred learning style for music for the second person is visual. The preferred style may vary from task to task.

Based on the above example of preferred learning styles of the two person, learning style and Multiple Intelligences are different. In the theory of the learning style, visual/auditory/kinesthetic, parents or teachers decided that their children or students have a visual learning style. Even though, Multiple Intelligences have these eight intelligences (Armstrong, 2002, p. 214). Besides, intelligence entails the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community (Gardner, 2002, p. 15). So, there are many, not just one different but autonomous intelligence capacities that result in many different ways of knowing, understanding, and learning about our world. That is why, it is of the utmost importance that we recognize and nurture all of the varied of human intelligences, and all of the combination of intelligence. We are all so different largely because we all have different combination of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world (Gardner, 2002, p. 12).

Multiple Intelligences theory is framed in light of the biological origins. In order to arrive at the list of eight intelligences, Gardner consulted evidence from several different sources. Other intelligences have been proposed, such as emotional intelligence, mathematical intelligence, and practical intelligence, but Gardner defends his eight dimensional models by claiming that the particular intelligences he has

nominated are verified by eight data based signs (Richards & Rodgers, 2002, p. 116).

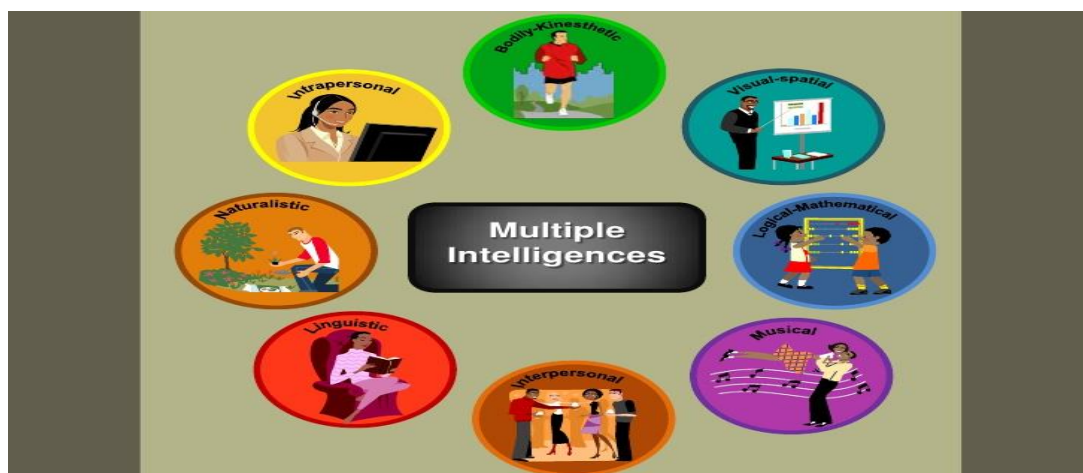
Marry Ann Christison stated that Gardner wanted to make a clear distinction between an intelligence with its biological origins and talent or skill. He identified the following basic criteria that each intelligence must be considered an intelligence, they are: (1) Brain damage studies, (2) Exceptional individuals, (3) Development history, (4) Evolutionary history, (5) Psychometric findings, (6) Psychological tasks, (7) Core operations, and (8) Symbol system. Each criteria are described as the following: Brain damage studies means that when people suffer brain damage as a result of an injury, one intelligence is often damaged. For example, if a person has damage to Broca's area (the left frontal lobe), linguistic intelligence may be greatly damaged. The individual may have great trouble reading, writing, and speaking, yet still be able to do math, dance, and sing. Gardner is actually proposing the existence of eight autonomous brain systems. His premise is that because a person can lose ability in one area while others are spared, there cannot simply be a single intelligence. Exceptional individuals mean that in some people, we can see intelligence operating at high levels. Some individuals can calculate multi digit numbers in their heads or can play a musical composition after hearing it only one. Savants are people who demonstrate amazing abilities in one intelligence while other intelligence are very low. Development history means that each intelligence has its own developmental history-its time of arising in childhood, its time of speaking during one's lifetime, and its time of gradual decline. Musical intelligence, for example, peaks early, but linguistic intelligence can peak very late. Evolutionary history means that each intelligence has roots in the evolutionary history of man. For example, archaeological evidence supports the presence of early musical instruments. The cave drawings of Lascaux are good examples of spatial intelligence. Psychometric findings means that we can look at many existing standardized test for support of the theory of Multiple Intelligences. The Weschsler intelligence scale for children includes subtests that focus on several of the different intelligences. Psychological tasks means that we can look at psychological studies and witness intelligences working separately. For example, subjects may master a specific skill, such as solving arithmetical problems, but they may still not be able to read well. Also, individuals may have a superior memory for words but not for faces. The tasks seem to be independent from each other. Core operations means that each intelligence has a set of core operations. For example, with musical intelligence, a person needs to be able to discriminate rhythmic structures and be sensitive to pitch. And symbol system means that Intelligences are susceptible to being symbolized. For example, there are spoken and written languages, graphic languages, computer languages, musical notation systems, and ideographic languages (Retrieved December 10, 2014, from <http://www.exchanges.state.gov/forum/vols/vol36/no2>).

#### 1.4.2 Gardner's Eight Intelligences (GEI)

Having sketched the criteria for an intelligence, Gardner identified seven intelligences and has since added an eighth. The list is not meant to be final or exhaustive. The point is not the exact number of intelligences, but simply the plurality of the intellect. Each person has raw biological potential. We

differ in the particular intelligence profiles with which we are born and the ways in which we develop them. Many people are surprised at some of the intelligence categories that Gardner has chosen because they never think of these areas as being related to intelligence. They think of the categories more as talents or aptitudes.

Gardner's eight intelligences are (1) bodily-kinesthetic intelligence, (2) intrapersonal intelligence, (3) interpersonal intelligence, (4) linguistic intelligence, (5) logical-mathematical intelligence, (6) musical intelligence, (7) spatial intelligence, and (8) naturalist intelligence. These intelligences are figured perfectly in a wheel and each intelligence is given the exemplified picture for making it clear to understand. Please pay attention to this picture below.



**Figure 3. Multiple Intelligences Wheel**

Bodily-kinesthetic intelligence is the ability to use the body to express ideas and feelings and to solve problems. This includes such physical skills as coordination, flexibility, speed, and balance. Teachers can help students develop their bodily-kinesthetic intelligence by providing opportunities for physical challenges during the second language lesson (Christinson, retrieved December 10, 2014, from <http://www.exchanges.state.gov/forum/vols/vol36/no2>).

Intrapersonal intelligence is the ability of students to understand themselves their strengths, weaknesses, moods, desires, and intentions. This includes such skills as responding effectively to other people in some pragmatic way, such as getting students or colleagues to participate in a project. An EFL teacher can help students develop interpersonal intelligence through activities that involve them in solving problems and resolving conflict.

Linguistic intelligence is the ability to use words effectively both orally and in writing. This intelligence includes such skills as the abilities to remember information, to convince others to help the students, and to talk about language itself. Teachers can help students develop linguistic intelligence by creating a rich print environment by providing things to look at, listen to, and write about and by creating many opportunities for interaction among students and between the teacher and the students.

Logical-mathematical intelligence is the ability to use numbers effectively and reason well. This includes such skills as understanding the basic properties of numbers and principles of cause and effect, as well as the ability to predict, using simple machines. Teachers can help students develop logical-mathematical intelligence by providing manipulative for experimentation with numbers and by using simple machines or computer programs to help students think about cause and effect.

Musical intelligence is the ability to sense rhythm, pitch, and melody. This includes such skills as the ability to recognize simple songs and to vary speed, tempo, and rhythm in simple melodies. Teachers can help students develop musical intelligence by using tape recorders for listening, singing along, and learning new songs.

Spatial intelligence is the ability to sense form, space, color, line, and shape. It includes the ability to graphically represent visual or spatial ideas. Teachers can help students develop spatial intelligence by providing many opportunities for visual mapping activities and encouraging students to vary the arrangements of materials in space, such as by creating charts and bulletin boards.

Naturalist intelligence is the ability to recognize and classify plants, minerals, and animals including rocks and grass, and all variety of flora and fauna. Teachers can help students develop their naturalist intelligence by focusing their attention on the world outside the classroom (Goleman, 1998, pp. 52-53).

### *1.5 The Multiple Intelligences-Based Instructional Strategy (MIB-IS)*

#### *1.5.1 The Implementation of MIB Theory to English Academic Writing Skill Instruction (EAWSI)*

Multiple intelligence was firstly developed as an account of human cognition that could be subjected to empirical tests. When Gardner wrote the frame of mind, he believed that his work would be chiefly interest to persons who trained in his discipline. But in fact, the reception among educators, however, was quite different. This theory seems to harbor a number of educational implication that are worthy of consideration.

Armstrong (1994) synthesized there are four key points that educators attractive about this theory: (1) each person possesses all eight intelligences, (2) intelligences can be developed, (3) intelligences work together in complex ways, and (4) there are many different ways to be intelligent. Each person possesses all eight intelligences means that in each person the eight intelligences function together in unique ways. Some people have levels of functioning in all or most of the eight intelligences; a few people lack most of the rudimentary aspects of intelligence. Most people are somewhere in the middle, with a few intelligences highly developed, most modestly developed, and one or two underdeveloped. Intelligences can be developed means that for this, Gardner suggests that everyone has the capacity to develop all eight intelligences to a reasonably high level of performance with appropriate encouragement, enrichment, and instruction. Intelligences work together in complex ways means that no intelligence really exists by itself in life. Intelligences are always interacting with each other. For example, to cook a meal, one must read a recipe (linguistic), perhaps double it (logical-mathematical), and prepare a menu that satisfies others you may cook for (interpersonal) and yourself (intrapersonal). And, there are many different ways to be intelligent means that there is no standard set of attributes that

one must have in order to be considered intelligent. I remember a friend in high school who was completely awkward in the dance class and yet a marvel in building construction. Both activities required bodily-kinesthetic intelligence.

Based on this attractive theory of intelligence, in order to develop the learner-centered instruction on English, every language instructional approach, method, or strategy has its specific emphasis to meet student's different need or interest for studying English as a second language. For instance, the language instruction methods of Silent Way emphasizes the development of student's inner thinking as intrapersonal intelligence; the Total Physical Response emphasizes language learning through physical action as bodily or kinesthetic intelligence; the Suggestopedia emphasizes the use of music as musical intelligence to facilitate language cognition; and the Communicative Approach and Cooperative Learning emphasize the importance of interpersonal relationship as interpersonal intelligence to learning language. And then The Whole Language Learning emphasizes not only the wholeness and reality of language as linguistic intelligence but also believe the coordination of kinesthetic, interpersonal, and intrapersonal intelligences to promote language learning (Lin, retrieved December 10, 2014, from <http://www.highschool.English.nccu.edu.tw/paper/ying.doc>).

The teachers can look at the right-hand and see whether they have given their class a variety of activities to help the various types of learners. This means that the teacher cannot teach directly to each individual student in his/her class of the time, he/she can ensure that he/she sometimes give opportunities during the language program for visualization in order the students can work on their own for sharing and comparing and for physical movement. By keeping eyes on different individuals, teachers can direct students to learning activities which are best suited to their own proclivities (Harmer, 2001, p. 48).

Many educators interested Multiple Intelligences as well the general public and the schools that use Multiple Intelligences theory encourage learning that goes beyond traditional books, pens, and pencils. Teachers and parents who recognize their learners and children's particular gifts and talents can provide learning activities that build on those inherent gifts. And as a result of strengthening such differences, individuals are free to be intelligent in their own ways (Richards & Rodgers, 2002, p. 116).

Some educators interpreted Multiple Intelligences theory as a framework for thinking school education. And some schools in USA have indeed remade their educational programs around the Multiple Intelligences model. So that, the application of Multiple Intelligences in language teaching have been more recent, so it is not surprising that Multiple Intelligences theory lacks of some of basic elements that might link to more directly to language education. One lack is a concrete view of how Multiple Intelligences relate to any existing language and/or language learning theory though at tempts have been made to establish such links (Christison, 1997, p. 1, p. 14).

Based on the above concepts, it can be said that the key points are all useful to the English teaching profession. They help us to understand the diversity in students and provide a framework for addressing these differences in language instruction at Senior High School. And so, educators have taken the



multiple intelligences theory, put it together in different ways, and applied it to their lessons planning and program and curriculum development. The multiple intelligences theory was being the model to be used in schools in designing and developing the school curriculum.

#### 1.5.2 The Application of Multiple Intelligences-Based Strategy (MIB-IS) in English Academic Writing Skill Instruction (EAWSI)

MI theory applied to the curriculum might be best represented by a loose and diverse collection of instructional strategies. Multiple intelligences theory represents a model of instruction that has no distinct rules other than the demands imposed by the cognitive components of the intelligences themselves and the specific needs of the domain in which they are teaching. In this sense, teachers can pick and choose from the activities to implement the theory in ways suited to their own unique teaching style and congruent with their educational philosophy, as long as that philosophy does not declare that all children learn in the exact same way (Armstrong, 2009, p. 56). It means that MI theory suggests a set of parameters within which educators can create new curricula. The theory provides a context within which educators can address any skill, content area, theme, and instructional objective and then develop at least eight ways to teach English subject matter. MI theory offers a means of building daily lesson plans, weekly units, year-long themes, and program in such a way that all students can have their strangest intelligences addressed at least some of the time.

Through MI theory, there are techniques and materials that can be employed in language instructions (Armstrong, 2009, p. 58). They are described in Table 4 bellow.

**Table 4. Summary of the Eight Ways of Instruction According to MI Theory**

Intelligences	Teaching Activities	Teaching Materials	Instructional	Educational	Teacher	Activity to begins a
	Samples	Samples	Strategies	movement sample (Primary intelligence)	Presentation Skill Sample	Lesson Samples
<b>Linguistic</b>	Lectures, discussion, word	Books, tape recorders,	Read about it, write	Critical literacy	Teaching	Long word on the
	game, storytelling, choral	typewriters, stamp sets,	about it, talk about		through	blackboard
	reading, journal writing	books on tape	it, listen to it		storytelling	
<b>Logical-</b>	Brainteasers, problem	Calculators, math	Quantify it, think	Critical thinking	Socratic	Posing a logical
<b>Mathematical</b>	solving, science	manipulative, science	critically about it,		questioning	paradox
	experiments, mental	equipment, math	put it in a logical			
	calculation, number games,	games	framework,			
	critical thinking		experiment with it			
<b>Spatial</b>	Visual presentations, art	Graphs, maps, video,	See it, draw it,	Integrated arts	Drawing,	Unusual picture on
	activities, imagination	lego sets, art materials,	visualize it, color it,	instruction	mind-mapping	the overhead
	games, mind-mapping,	optical illusions,	mind-map it		concepts	
	metaphor, visualization	cameras, picture library				

<b>Bodily-</b>	Hands-on learning, drama,	Building tools, clay,	Build it, act it out,	Hands-on learning	Using	Mysterious artifact
<b>Kinesthetic</b>	dance, sports that teach,	sports equipment,	touch it, get a “gut		gestures or	passed around the
	tactile activities, relaxation	manipulative,	feeling” of it, dance		dramatic	class
	exercises	tactile learning	it		expressions	
		resources				
<b>Musical</b>	Rhythmic learning,	Tape recorder, tape	Sing it, rap it, listen	Orff schulwerk	Using voice	Piece of music
	rapping, using songs that	collection, musical	to it		rhythmically	played as students
	teach	instruments				come into class
<b>Interpersonal</b>	Cooperative learning, peer	Board games, party	Teach it, collaborate	Cooperative learning	Dynamically	Turn to a neighbor
	tutoring, community	supplies, props for	it, interact with		interesting	and share
	involment, social	role-plays	respect to it		with students	
	gatherings, simulations					
<b>Intrapersonal</b>	Individualized instruction,	Self-checking	Connect it to your	Individualized	Bringing	Close your eyes and
	independent study, options	materials, journals,	personal life, make	instruction	feeling into	think of a time in
	in course of study,	materials for projects	choices with regard		presentation	your life when ...
	self-esteem building		to it, reflect on it			
<b>Naturalist</b>	Nature study, ecological	Plants, animals,	Connect it to living	Ecological studies	Linking	Bring in an
	awareness, care of animals	naturalists’ tools (e.g.,	things and natural		subject matter	interesting plant or
		binoculars), gardening	phenomena		to natural	animal to spark
		tools			phenomena	discussion about
						topic

Below is the list that the teacher of academic writing can convert easily into his/her writing class. The teacher can plan his/her writing class based on the Gardner’s Multiple Intelligences instructional application in the way to create lesson plan or curriculum units in teaching academic writing as an organizing framework (MI Instruction Applications, retrieved December 10, 2014, from <http://www.creative-writing-ideas-and-activities.com>). Please pay attention to the list of instructional application of Gardner’s Multiple Intelligences in the Table 5 below.

**Table 5. The Instructional Applications of Gardner’s Multiple Intelligences (GMI) in English Academic Writing Skill Instruction (EAWSI)**

<b>Dimension</b>	<b>Application in Writing Skill</b>
<b>Linguistic</b>	How can I get students to talk or write about the idea?
<b>Logical-mathematical</b>	How can I bring number, logic and classification to encourage students to quatify or clarify the idea?
<b>Spatial</b>	What can I do to help students visualize, draw, or conceptualize the idea spatially?

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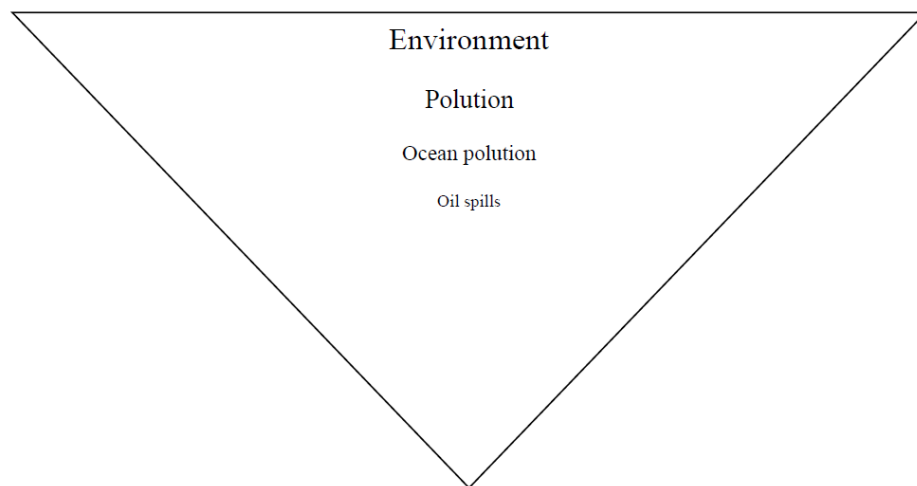
<b>Musical</b>	How can I help students use environmental sounds or set ideas into rhythm or melody?
<b>Bodily-kinesthetic</b>	What can I do to help students involve the whole body or to use hands-on experience?
<b>Interpersonal</b>	How can peer, cross age, or cooperative learning be used to help students develop their interactive skill?
<b>Intrapersonal</b>	How can I get students to think about their capacities and feelings to make them more aware of themselves as persons and learners?
<b>Naturalist</b>	How can I provide experiences that require students to classify different types of objects and analyze their classification schemes?

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### 1.5.3 The Argumentative Essay Writing Stages (AEWS) through Multiple Intelligences-Based Instructional Strategy (MIB-IS)

#### The Argumentative Essay Writing Stages (AEWS)

English writing for many Senior High School students is pretty challenging. If the students are given tasks, they usually don't give enough attention to the good English writing process. They just directly write and so the often get difficulties in getting ideas, organizing sentences and paragraphs, and so on. In English academic writing process gives students an easier way in dealing with writing, gives them a clear and systematical steps. They are: creating (prewriting), planning (outlining), writing (drafting), and polishing (revising and editing). The first stage in writing process is to choose a topic and collect information about it (prewriting). There are two stages in this step: (1) choosing and narrowing a topic, and (2) generating ideas. In choosing and narrowing a topic, a writer can choose a topic that interests him/her or a topic fits the assignment. The following diagram illustrates the process of narrowing a topic.



**Figure 4. The Process of Narrowing a Topic**

After the writer has chosen a topic and narrowed it, he/she collect information and develop ideas. He/she needs to go to outside sources such as newspapers, magazines, library books, or the internet. Besides that, he/she can interview friends, classmates, and neighbors to get his/her ideas and opinions or he/she can search his/her own brain and life experiences. And for useful techniques for exploring within his/herself are journals (he/she can record his/her daily experiences or a he/she can write down quotations that are meaningful to him/her, listing (a brain storming technique in which he/she think about his/her topic and quickly make a list of whatever words or phrases come into his/her mind), free writing (a brainstorming activity in which he/she writes freely about a topic because he/she is looking for a specific focus), and clustering (a brainstorming activity he/she can use to generate ideas).

As a first step toward making an outline as step two of writing process, he/she needs to divide the ideas in the communication problems list further into sub lists and cross out any items that do not belong or that are not useable and he/she has to write a topic sentence. The topic is clearly communication problems. And an outline is a formal plan for a paragraph. The writer should be relatively easy to write a paragraph. There is a topic sentence, two main supporting points, supporting details, and this is stand alone paragraph, a concluding sentence. The formal outline is as in the Table 6 below.

**Table 6. The Formal Writing Outline/Plan**

<b>Topic, supporting, and concluding sentence</b>	<b>Communication Problems</b>
<b>Topic sentence</b>	One problem that international students face in the United States is communication with Americans.
<b>Supporting point</b>	A. International students have poor verbal skill
Supporting detail	1. Lack vocabulary
Supporting detail	2. Have poor pronunciation
<b>Supporting point</b>	B. American are difficult to understand
Supporting detail	1. Use incomplete sentences
Supporting detail	2. Use unclear expressions
Supporting detail	3. Talk to fast
Supporting detail	4. Use slang and idioms
<b>Concluding sentence</b>	Because of their own poor verbal skills and because of Americans' way of speaking, international students have a hard time communicating when they first arrive in the united States.

The third step of writing process in writing the rough draft. The writer needs to follow the outline and not be worry about grammar, punctuations, and spelling. A rough draft is not supposed to be perfect. And writing can be a continuous process of discovery because of the writer will think of new ideas that

may not be in his/her brainstorming list. He/she can add or delete ideas at any time in the writing process in order to make sure that any new ideas are relevant.

The fourth step in writing process is polishing what the writer has been written. Editing or polishing is most successful if the writer does in two stages: (1) attack the big issues of content and (2) organization (revising) then work on the smaller issues of grammar and punctuation (editing). Revising means that after the writer writes the rough draft, he/she revises it and when revise, he/she changes what has been written to improve, check the content and organize, including unity, coherence, and logic. He/she can change, rearrange, add, or delete all for the goal of communicating his/her thoughts more clearly, effectively, and in a more interesting way. And during the forts revision, the writer may not try to correct grammar, sentence structure, spelling, or punctuation. This is a proofreading which he/she will do later. Besides that, he/she needs to be concerned mainly with content and organization. And then the writer needs to read over the paragraph carefully for general overview, focus on the general aspects of the paper and make notes in the margins about rewriting the parts that need to be improved, check to see that he/she has achieved his/her stated purpose, check for general logic and coherence, check to make sure that his/her paragraph has a topic sentence and that the topic sentence has a central (main) focus, check for unity, check to make sure that the topic sentence is developed with sufficient supporting details, check his/her use of transition signals, and finally does his/her paragraphs have or need a concluding sentence.

Proofreading stage in editing or polishing step of writing process is checking for possible error in grammar, sentence structure, spelling, and punctuation. The writer needs to check each sentence for correctness and completeness, check each sentence for subject and verb, subject-verb agreement, correct verb tenses, noun plurals, articles, and so on, check the mechanics: punctuation, spelling, and capitalization, check for incorrectly use or repeated words, and check for constructions (Oshima & Hogue, 2006, pp. 265-266, pp. 271-273).

The Multiple Intelligences-Based Instructional Strategy (MIB-IS) in English Argumentative Essay Writing (EAEW)

The Multiple Intelligences theory, especially developed by Gardner had been open the door to a wide range of instruction strategies that can be easily implemented in the language class (English class). Multiple intelligences-based instructional strategy offers English teachers an opportunity to develop innovative instructional strategy that are relatively new to the educational scene, especially in Indonesia. To implement this instructional strategy, a teacher needs to use the following questions in designing Multiple Intelligences lesson plans in teaching academic writing: (1) for math logic intelligence: How can I include numbers sense and calculations?; (2) for spatial intelligence: How can I include visuals, color, graphs, and picture?; (3) for intrapersonal intelligence: How can I include self-reflection and personal choice? (4) for interpersonal intelligence: How can I include group work, sharing, and discussion?; (5) for bodily-kinesthetic intelligence: How can I include movement, exercise, dance, and drama?; (6) for musical intelligence: How can I include music, rhythm, and sounds?; (7) for verbal

linguistic intelligence: How can I include reading, writing, and speaking?; and (8) for naturalist intelligence: How can I include the natural world and its experiences? (Borek, 2003, p. 9).

The Classroom Action Research (CAR) of the Multiple Intelligences-Based Instructional Strategy (MIB-IS) for English Academic Writing Skill Instruction (EAWSI)

## 2. The CAR Form

The following Table 7 describes the detail of students' activities in the English academic writing class.

The activities can be used by Senior High School English teachers to strengthen students' intelligences.

**Table 7. The CAR Form of Students' Activities in EAWSI**

Instructional Strategy	Steps		Student activity	Intelligence
Multiple Intelligences-Based Instructional Strategy (MIB-IS)	1. Creating or prewriting	a. Choosing an	Paying attention on the teacher's explanation	Linguistic
		narrowing a topic	Focusing on slides and pictures presented by the teacher	Spatial
			Watching a clip related to the topic presented by the teacher	Spatial
			Listening to a song related to the topic	Musical
			Enjoying a background music	Musical
			Choosing a topic that fit the assignment and related to students' environment	Naturalist
			Having a private space	Intrapersonal
			Having a small talk or peer sharing	Interpersonal and linguistic
		b. Collecting information and generating ideas	Classifying and categorizing	Logical-mathematical
			Brainstorming	Linguistic
	Asking and confirming to the teacher for unclear information or guidance		Interpersonal	
	Listening and following the guideline explained by the teacher		Linguistic	
	Following the tips on how to take important information from books, newspapers, and etc., explained by the teacher		Interpersonal, Linguistic,	
	Journal writing		Logical-mathematical	
	Listing		Linguistic	
	Free writing		Logical-mathematical	
	Clustering		Linguistic	
	Making a mind map		Logical-mathematical	
	Reading printed materials (books, articles, newspapers, magazines, etc.		Spatial	
	Interviewing many different friends	Linguistic		
		Interpersonal and Bodily-kinesthetic		
2. Planning/	a. Making sublist	Making sublist and crossing out any items that do not belong or that are	Linguistic and	

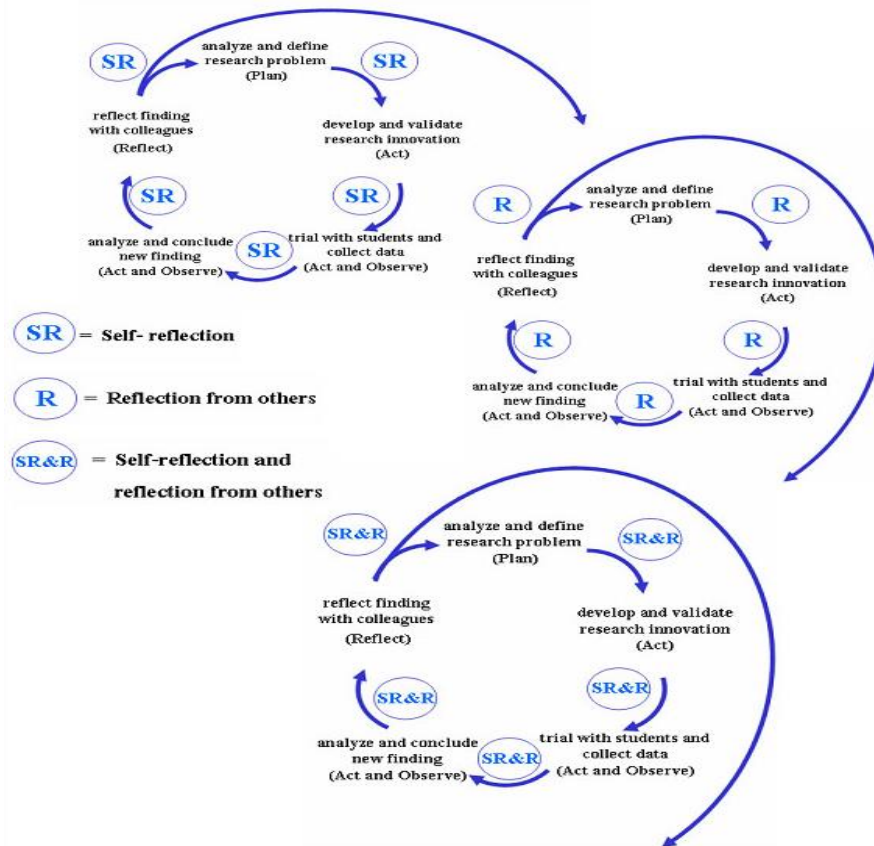
Outlining		not usable	Logical-mathematical
		Making rough logical sequential outline	Logical-mathematical
b. Writing the topic sentence		Enjoying a background music	Musical
		Deciding the topic sentence	Intrapersonal
c. Outlining		Finalizing the outline containing topic sentence, main supporting points, supporting detail and a concluding sentence	Logical-mathematical and Intrapersonal
		Sharing in a small group about his/her outline	Interpersonal
3. Writing	Writing the rough draft	Writing a rough draft by following the outline	Linguistic,
		Having an indoor or outdoor private space	Intrapersonal, and
		Enjoying a background music	Logical-mathematical
4. Polishing	a. Revising		Naturalist
			Musical
		Checking content and organization including unity coherence and logic	Linguistic and
		A group session	Logical-mathematical
	b. Editing	Presenting the writing result in a group	Intrapersonal
		Listening to a background music or sound of the nature	Linguistic and
		Proofreading his/her paper for possible error in grammar, sentence structure, spelling and punctuation	Bodily-Kinesthetic
			Musical
		A group session	Linguistic and
		Socratic questioning	Logical-mathematical
		Private space	Interpersonal
			Linguistic
			Intrapersonal

### 2.1 The Action Hypothesis

Based on the Action research form above, in order to make this study designed clearly, it would find a significant improvement on Tompas Baru Senior High School students' academic writing skills of grade 11 by implementing the Multiple Intelligences-Based Instructional Strategy (MIB-IS) in every single cycle.

### 3. Method

This study uses Classroom Action Research (CAR). There are four steps in this CAR: (1) plan, (2) action, (3) observation, and (4) reflection (Kemmis & McTaggart, 1982, p. 10). Nakomnayok (2009) explained the process of this kind of research method as illustrates in Figure 5 bellow (Retrieved December 30, 2014, from <https://www.gotoknow.org/posts/289863>).



**Figure 5. A Level of Reflection Model in Conducting Classroom Action Research**

The argumentative essay instruction plans in some systematic actions and managing the process of teaching writing in order to increase students' writing skill. The rule of teaching writing process has been stated in the lesson plan for creating a writing class condition related to students' eight intelligences and a good mutual interaction between teacher and student(s) and student(s) and student(s).

Action research model is a type of practitioner research that used to improve practitioner's practice. Action implies doing or changing something. So, the participants involved are the students of Tompasso Baru Senior High School one of grade 11 of science class. There are two collaborators in this research method and the writer acts as coordinator, facilitator, and catalyst of the implementation of the plan, action, observation, and reflection toward the process of the instruction and the research itself. The writer becomes also the one who make a synthesis and give a report and cooperation is built with the students.

The action procedure implements in this research method is expected to improve the students argumentative essay writing through Multiple Intelligences-based instructional strategy as the following: (1) the research is started with the first survey to get factual information of participants' habit and writing skill (questionnaire is given to get the students' writing habit and writing test is given to measure the students' writing skill); (2) the writer identify the problem to create an action plan to



improve the students' argumentative essay writing through Multiple Intelligences-based instructional strategy based on the data taken from the first survey; (3) the action and observation are conducted in the same time (observation focuses on how the Multiple Intelligences-based instructional strategy implemented to improve students' writing skill); and (4) reflection is done as the activity of rethinking or evaluating the Multiple Intelligences-based instructional strategy that had been implemented in order to identify the influence of the strategy in improvement of academic writing skill after the writer and the collaborators have the reflection by considering many aspects of the students and then revise the plan to maximize the action of the next cycle.

### *3.1 The Action Achievement Criterion*

The expected outcome of this action intervention is the improvement of students' academic writing skill. It can be measured throughout how students can write their argument given by the teacher. So, in every single cycle is used a responsive writing test. There are five different levels in Analytic Scale for Rating Composition Task Brown and Bailey: (1) excellent writing (80-100), (2) good writing (70-79), (3) adequate writing (60-69), (4) poor writing (40-59), and (5) very poor writing (unacceptable) ( $\leq 39$ ) (Brown, 2004, p. 244).

## **4. Result**

### *4.1 The Study Finding*

The MIB-IS can significantly improve the students' EAWS. It can be occurred by the students followed the stages based on the MIB-IS of EAWSI. The creating stage helped students to try focusing on gaining ideas to express their own arguments towards the question problem given. It also helped students to do brainstorming in getting ideas as their own arguments and creating meaningful connection between different ideas got by making a colorful mind map. The planning stage can help students to put ideas got in creating stage into an outline. After inventing point-by-point logical arguments for agreement and disagreement and then finding solution on the problem, they listed appropriate arguments supported their ideas (make systematic ideas) of the subject matter and put them as the main idea in paragraphs. The teacher role here is to give person to person communication focusing on how the teacher and students related to each other and assisted them in organizing the ideas. The writing stage can help students to follow the outline as closely as possible. A rough draft is not supposed to have perfect grammar and spelling, the main thing is the students are able to develop their ideas into paragraphs. And then the polishing stage can help students to revise (to hit the big content and organization issues, unity, coherence, and logic) and to edit (to hit the smaller grammar and spelling issues) their academic writing.

The activities in each action of this CAR cycle one were based on the eight intelligences (linguistic, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, musical, and naturalist). And so based on the CAR action and observation followed by students in MIB-IS of EAWSI the CAR cycle two result shows that there is a significant improvement in the students' academic writing skill in

the area of argumentative essay stages (format, mechanic, content and organization, and grammar and sentence structure). This can reach because of the students had understood and followed the stages properly. Beside that it could be identified that after enjoying and becoming accustomed to MIB-IS of EAWSI they can be easily followed the argumentative essay writing stages and the enjoyable and continual exercises.

The argumentative essay writing test result shows that there was an enhancement in the students' academic writing skill. In pretest the students' average achievement score was 48.50 and after had followed the CAR cycle one achievement test, they got 68.80. And finally, they got a significant academic writing achievement improvement when the students had followed the CAR cycle two achievement test. Here they got 75.20. The students' academic writing skill level got in pretest was as the following: excellent was 1.80%, good was 8.20%, adequate was 8.80%, poor 58.20%, and unacceptable was 23.00%. The students' academic writing skill level got in the CAR cycle one achievement test was as the following: excellent was 6.20%, good was 24.40%, adequate was 50.00%, poor was 19.40%, and unacceptable was 0%. And the students' academic writing skill level got in the CAR cycle two achievement test was as the following: excellent was 20.20%, good 75.20%, adequate was 4.60%, poor was 0%, and unacceptable was 0%. According to these data gotten from pretest, CAR cycle one test, and CAR cycle two test above, it can be known that the students' academic writing skill improve significantly. So, it can be concluded that the MIB-IS is successfully implemented in EAWSI at Tompasso Baru Grade 11 of Senior High School science students.

The academic writing skill test result in the area of CAR cycle one format stage, the students' average score of the first action is 72.00, the second action is 77.20, and the third action is 86.20. Whereas in the area of CAR cycle two format stage, the students' average score of the first action is 87.40, the second action is 90.20, and the third action is 96.40. So according to these data gotten from CAR cycle one and CAR cycle two academic writing test result above, it can be concluded that the students' academic writing skill improve significantly in the area of format stage.

The academic writing skill test result in the area of CAR cycle one mechanic stage, the students' average score of the first action is 74.10, the second action is 78.60, and the third action is 76.20. Whereas in the area of CAR cycle two mechanic stage, the students' average score of the first action is 77.60, the second action is 86.00, and the third action is 94.10. So according to these data gotten from CAR cycle one and CAR cycle two academic writing test result above, it can be concluded that the students' academic writing skill improve significantly in the area of mechanic stage.

The academic writing skill test result in the area of CAR cycle one content stage, the students' average score of the first action is 64.70, the second action is 70.20, and the third action is 78.30. While in the area of CAR cycle two content stage, the students' average score of the first action is 66.40, the second action is 74.30, and the third action is 76.50. So, based on the academic writing skill test gotten from CAR cycle one and CAR cycle two above, it can be concluded that the students' academic writing skill improve significantly in the area of content stage.

The academic writing skill test result in the area of CAR cycle one organization stage, the students' average score of the first action is 62.50, the second action is 66.40, and the third action is 75.10. While in the area of CAR cycle two organization stage, the students' average score of the first action is 68.20, the second action is 76.30, and the third action is 78.60. So, based on the academic writing skill test gotten from CAR cycle one and CAR cycle two above, it can be concluded that the students' academic writing skill improve significantly in the area of organization stage.

The academic writing skill test result in the area of CAR cycle one grammar and sentence structure stage, the students' average score of the first action is 66.70, the second action is 68.80, and the third action is 76.40. While in the area of CAR cycle two grammar and sentence structure stage, the students' average score of the first action is 72.20, the second action is 78.50, and the third action is 80.80. So, based on the academic writing skill test gotten from CAR cycle one and CAR cycle two above, it can be concluded that the students' academic writing skill improve significantly in the area of grammar and sentence structure stage.

According to the statistical analysis of the academic writing skill test result by using T-test for identifying the mean of the academic writing skill test between pre-test (T-1) before the actions and the post-test (T-2) after the actions, the calculation process shows as the in the Table 8 below.

**Table 8. The Mean Score of Pre-test and Post-test of the Students' Academic Writing Skill Test**

	Cycle One	Cycle Two
Mean	64.40	78.60
	2468	2880
Observations	40	40
Difference	525	
Standard Deviation	5.85	
Standard Error	0.92	
Mean of Difference	14.05	
T Observation	16.85	
T-Table	2.76	

According to the Table 8 above, it can be known that the  $T_o$  result is bigger than the  $T_t$  result. It means that there is a significant difference between the CAR cycle one and the CAR cycle two. So that it can be concluded that the students' academic writing skill improve significantly by implementing the MIB-IS of EAWSI.

Based on the questionnaires of the CAR cycle one, the students had responded the number of questions related to the their EAWI. Their response question three relating to the predilection of English writing skill was 80% of them had very less interest to EAWS. Some of them had answered they love to

express themselves through EAWS. Their response to question four relating to applying the EAWS stages (creating, planning, writing, and polishing) was 86% of them did not know yet about the stages and so they never use the stages. And their response to questions 27 and 28 relating to polishing what one has written was 92% of them never revise their writing results. There are only some of them know how to revise ideas. And there are 72% of them never edit their writing results, but some other responded that they always check the grammar and punctuation.

Based on the questionnaire of CAR cycle two, the students had responded the number of questions related to the their EAWS. Their response to question three relating to the predilection of English writing skill was 96% of them had very high interest to EAWS. Some of them had answered they get difficulties to express themselves through EAWS. Their response to question four relating to applying the EAWS stages (creating, planning, writing, and polishing) was 100% of them know the stages and so they use the them. Their response to questions 27 and 28 relating to polishing what one has written was 100% of them revise and 88% of them edit their writing results.

## 5. Discussion

Multiple Intelligences-Based Instructional Strategy (MIB-IS) can improve Senior High School students' academic writing (argumentative essay writing) in eight students' intelligences (linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist) following the writing process of creating, outlining, drafting, and polishing. The process of academic writing instruction through MIB-IS will be more effective if the students are able to be more active in following every single step of writing process to hit the big issues of content, organization, unity, coherence, logic and the smaller issues of grammar, sentence-structure, punctuation, and spelling.

Giving an academic writing exercises in every phase of instruction is really important to improve students' argumentative essay writing skill for students to master the concepts comprehensively and integrated properly. And so, the school as an educational institution must prepare its students to go to the university by the capability of supporting MIB-IS implementation in academic writing instruction as an effective English instructional strategy.

Based on the conclusion above, it can be suggested the following: (1) English teachers of Senior High School must be able to master the MIB-IS and academic writing theories in order to implement MIB-IS to improve the students' academic writing skill; (2) English teachers are suggested to always implement classroom action research in the process of English instruction in order to make reflection and introspection of his/her teaching and learning process by considering suitable approaches, methods, or strategies to the instruction materials; and (3) Tompas Baru Senior High School one as the educational institution is expected to initiate the MIB-IS to put it integrated in the school curriculum.

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