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The Use of Moodle in Systematic Strategy Training

Irma Permatawati, Pepen Permana
Department of German Education
Universitas Pendidikan Indonesia
Bandung, Indonesia
irma.permatawati@upi.edu

Abstract—**Strategy training aims to provide learners with a repertoire of strategies and appropriate strategies for them. Awareness, implementation, and evaluation are the steps of systematic strategy training. It is important to talk about strategies at regular intervals during strategy training and to remind learners to try different strategies. Since there is usually too little time in the classroom, these steps could be done online. Moodle would be a suitable alternative. This article discusses the result of an empirical study concerning the use of Moodle in systematic strategy training in preparation for the module listening part 1 of the Goethe-Zertifikat B1. The results showed that Moodle with various features offered could be used to implement the three stages of strategy training systematically. Another finding from this study is the low students' participation which is assumed to occur because this training program is elective. This is potentially a field that needs further study.**

Keywords: listening, Moodle, systematic strategy training

I. INTRODUCTION

On August 29, 2019, the Goethe-Zertifikat B1 exam for German students of the Universitas Pendidikan Indonesia (UPI) was conducted. The exam was attended by 30 students. As part of this exam, a preparatory course was offered in which the students dealt with the four modules of the Goethe-Zertifikat B1 exam. During the preparatory course, it was noticeable that the listening module, especially part 1, had caused difficulties for most students. According to Glaboniat, Perlmann-Balme and Studer (2013, p.75), the examination objectives and form of the listening module part 1 are as follows: "*Die Prüfungsteilnehmenden hören fünf kurze Texte im Umfang von je 60 bis 90 Wörtern. Sie hören diese Texte zweimal und lösen zu jedem Text zwei Aufgaben. Bei den Texten handelt es sich um monologische Kurztexte wie Ansagen, Durchsagen und Anrufbeantwortertexte. Die intendierten Hörstile sind global (erstes Hören) und selektiv (zweites Hören). Damit sollen zwei verschiedene Verstehensziele erreicht werden: Das Verstehen einer globaleren Aussage oder einer Hauptaussage (erstes Item, überprüft durch das Richtig-Falsch-Format) und das Verstehen wichtiger Einzelheiten (zweites Item, überprüft durch ein dreigliedriges Auswahlformat). In dieser Weise sind zehn (2x5) Items zu bearbeiten. Vor dem jeweils ersten Hören der fünf Texte gibt es eine Pause von zehn Sekunden, damit die Aufgaben gelesen werden können.*"

Students were not yet familiar with the form of examinations, which are addressing two types of tasks: true-false and multiple-choice tasks. Concerning exam preparation, the following is to be read in *Tips und Tricks für die Prüfungsvorbereitung Modul Hören* (www.goethe.de): "*Umso wichtiger ist es, dass die Prüfungsteilnehmenden sowohl im Unterricht häufig das Hörverstehen trainieren als auch mit den Strategien für die Bearbeitung von Höraufgaben vertraut gemacht werden.*" (Krüger, p.7). In the preparatory course, listening comprehension and general strategies were trained. A systematic strategy training can be used in order to enable students to systematically working on the tasks. The goal of strategy training is according to Ballweg, Hufeisen, Drumm, Klippel and Pilypaitytė (2013, p.100) as follows: "*..., dass die Lernenden ein Repertoire an Strategien zur Verfügung steht und sie besonders solche Strategien kennenlernen, die für sie geeignet sind.*"

According to Ballweg et al. (2013), a systematic strategy training includes three steps: awareness, experimentation, and assessment (Bewusstmachung, Ausprobieren, Bewerten). The step awareness is about the reflection on the usual process. Through experimentation, learners get a chance to try out different strategies, and in the step assessment, the learners reflect which strategies work well for them and which are not. We can also discuss the reasons. These three steps are in accordance with Chamot's opinion (2004, p.18) as follows: "The implications for teaching are that language learners need to explore different learning strategies, experimenting and evaluating, and eventually choosing their own set of effective strategies."

The problem with the preparation course is that there is not enough time to carry out systematic strategy training. That is why we came up with the idea to use the LMS Moodle as a supplement to the preparation course. The application of Moodle in this study is based on the following theory: "As a courseware package and learning system, Moodle has great potential for supporting conventional classroom instruction, for example, to do additional work outside of class, to become the delivery system for blended (or hybrid) course formats, or even to be used as a standalone e-learning platform" (Brandl, 2005, p.17).

Organizing an online exam preparation program in addition to the exam preparation program carrying the principles of blended learning. This is in accordance with the following quotation: "Blended instruction, a combination of traditional classroom teaching and online learning methods is popular and more practical for both teachers and learners. In addition to retaining the advantages of classroom face-to-face interaction, online learning tools can extend the benefits of the course.

Generally speaking, blended learning usually employs a wide variety of media and materials as well as different teaching methods and assessment tools." (Sharma & Barrett, 2007, as cited in Ting & Chao, 2013, p.26)

II. METHODS

This research is an empirical study using the One-Shot Case Study. According to Fraenkel & Wallen (2006, p.271), the objectives of this research design are as follows: "In the one-shot case study design, a single group is exposed to a treatment or event and a dependent variable is subsequently observed (measured) to assess the effect of the treatment." The systematic strategy training consists of two stages, each consisting of the three steps, namely, awareness, experimentation, and evaluation. The systematic strategy training can be found online at https://vkz.jerman.upi.edu.

The online systematic strategy training is an optional offer and was addressed to German students of the 7th semester, who were sent to the Goethe-Zertifikat B1 exam according to their performance. The first phase was conducted on September 25th, 2019 and the second phase was on September 27th. Each phase consists of three steps. The first step is awareness, in which students are given 10 questions.

The first two questions of this stage are about the intended listening style. The decision that such tasks are assigned to the first step is according to Rösler and Würffel (2014, p.106-107) as follows: "*Lese-, Hör- und Hör-Sehstille bestimmen, wie man einen Text aufnimmt oder rezipiert. ... Lernenden diese Stile bewusst zu machen und mit ihnen zu üben, sie anzuwenden, ist aus zwei Gründen sinnvoll: Lernende erkennen, dass sie Texte auch schon als Anfängerin und Anfänger auf verschiedene Art und Weise lesen können und das bewusste Anwenden der Rezeptionsstile kann außerdem helfen, mit bestimmten Schwierigkeiten besser umzugehen.*" There is a difference between the first and second phases in the first task, namely the task types.

The third question, in the first and second phases, is about the actual step of awareness. Students reflect on how they normally deal with listening tasks. The *featuer* used for the step awareness is the questionnaire, so there is also the opportunity to see answers of all students. The students can describe their reflection using their mother language, which is Bahasa Indonesia. The next 7 questions deal with the listening strategies that can be found in the *Handout Tipps und Tricks für Prüfungsvorbereitung Modul Hören* at www.goethe.de. There are 4 general strategies for listening part 1 and 3 listening strategies. In the first phase, there are 3 choices given to find out if the students know the strategies and how they dealt with them. In the second phase, there are only 2 choices available. It is determined whether the students can understand the content of the strategies. The students should then try out these strategies in the second step.

The second step of systematic strategy training is to try out the strategies. The feature used for this step is tests. The tasks are taken from the book *Zertifikat B1 neu 15 Übungsprüfungen.* For the first phase, we used exercise 14 and for the second phase exercise 12. There is no time and trial limit for this step.

Evaluation is the last step of systematic strategy training. In this step, the students reflect which strategies work well for them and which ones do not. The feature *quesionnaire* is used for this step. There are 9 questions in each phase. The first question in the two phases deals with the question of whether the students are satisfied with the result of the test or not, and why. They can answer this question using Bahasa Indonesia. The next 7 questions are about strategies that have been introduced in the first step. Four choices are available in the first and second phases. The difference between the two phases is that in the first phase students should determine if and how the strategies worked. In the second phase, the evaluation is more detailed, in that the students should evaluate how the strategies were. In the last question of this step, students should tell their opinion about (other) strategies that have helped them the most.

III. FINDINGS AND DISCUSSION

According to their performance, 30 Students from the 7th semester had the opportunity to take the Goethe-Zertifikat B1 exam at the Goethe Institut Bandung, but not all of them have used this online systematic strategy training because it is an optional offer. Only 11 from 30 students have taken all steps in the two phases. These Students will be considered in documenting the research results. The participation of students can be illustrated as in Table I.

TABLE I. THE PARTICIPATION RATE OF THE STUDENTS

Steps	Number of Students and Attempts	
	Phase 1	Phase 2
Awareness	24	11
Experimentation	31	16
Evaluation	21	11

The low level of student participation in this program indirectly indicates their level of motivation in learning German as a foreign language. One of the factors that determines a person's motivation in learning a foreign language is the environment. Oxford (2003, p.272) argues that: "In contrast, a foreign language (e.g., German learned in Australia) is a language studied in an environment where it is not the primary vehicle for daily interaction, where input in that language is limited, where the language is not usually needed in order to survive, and thus was motivation to learn the language might be quite variable. The difference between second and foreign language learning environments sometimes proves to be crucial with reference to learning styles, strategies, motivation, and other factors in language learning."

The quotation above states that the foreign language learning environment determines the use of strategy and motivation degree in learning languages. As mentioned earlier, this systematic strategy training program is in addition to the exam training preparation program and is not mandatory. Student participation in this program is low because they do not feel the need. They know that their involvement will not affect the score of a course. Students with high motivation in

learning German as a foreign language are those who strive to complete this voluntary training program.

1. Awareness

The goal of this step is for the students to reflect on their usual process of working on the listening tasks part 1. The first two questions are about recognizing the intended listening styles. For the true-false questions, the global listening style is suitable and for the multiple-choice questions is the selective listening style. In the first phase, all students were able to identify the right listening style for the true-false questions, but in the second phase, only 8 out of 11 students were able to identify the correct listening style. Two students have chosen a selective listening style. For the multiple-choice questions, 6 students selected the right listening style in the first phase, namely selective listening style and 5 students selected the detailed listening style. In the second phase, 7 students selected the selective listening style and 3 students the detailed listening style. The ability of students to recognize the intended listening style for the first part of the listening module can be seen in Table II.

TABLE II. THE ABILITY OF STUDENTS TO RECOGNIZE LISTENING STYLES

Students	Phase 1		Phase 2	
Questions	1	2	1	2
S1	global	selective	global	selective
S2	global	selective	global	selective
S3	global	detailed	selective	detailed
S4	global	detailed	global	detailed
S5	global	selective	selective	selective
S6	global	detailed	global	selective
S7	global	selective	global	detailed
S8	global	selective	global	selective
S9	global	detailed	global	selective
S10	global	detailed	global	selective
S11	global	selective	global	selective

The third question of this stage relates to the strategies students usually apply in working on the listening questions in the first part. In this section, they can write their answers using Bahasa Indonesia. Nine out of 11 students in the first and second phases confirmed that they are normally reading the tasks and highlighting keywords before listening. Questions number four to ten at this stage relate to listening strategies which will be introduced through systematic strategy training. Student responses to these strategies can be seen in Table III.

TABLE III. THE RESULTS OF THE QUESTIONNAIRE FOR THE AWARENESS STEP

Students	Phase 1							Phase 2						
Questions	4	5	6	7	8	9	10	4	5	6	7	8	9	10
S1	3	2	3	3	3	3	2	1	1	1	1	1	1	1
S2	3	3	3	3	3	3	3	1	1	1	1	1	1	1
S3	3	3	3	3	3	2	2	1	2	1	1	1	2	1
S4	2	2	3	3	3	2	3	1	1	1	1	1	2	1
S5	3	3	3	2	3	2	2	1	1	1	1	1	1	1
S6	3	3	1	2	3	2	2	1	1	1	1	1	1	1
S7	3	3	3	3	3	3	3	1	1	1	1	1	1	1
S8	3	3	3	3	3	3	3	1	1	1	1	1	1	1
S9	3	2	2	3	3	2	2	1	1	1	1	1	1	1
S10	2	3	3	3	3	3	3	1	1	1	1	1	1	1
S11	2	3	3	3	3	2	2	1	1	1	1	1	1	1

The choices in the first phase are as follows: (1) I always do this step; (2) I want to do this step; and (3) I never do this step. In phase 2, the numbers are as follows: (1) I understand the sentence; and (2) I do not understand the sentence. The table shows that most students never did most of the strategies in the first phase. Only one person has confirmed that she has used general strategy 3. To strategy 3, everyone agreed that they never did it. This shows that most of the strategies introduced are relatively new to them. In the second phase, it can be seen that the students understood almost all formulation of the strategies. Only one student did not understand the sentence of general strategy 2 and two students did not understand the sentence of strategy 2.

The use of questionnaire features at this stage is considered appropriate because it can reveal the use of learning strategies by students. In connection with this, Chamot (2004, p.15) states as follows: "Learning strategies are for the most part unobservable, though some may be associated with observable behavior. For example, a learner could use selective attention (unobservable) to focus on the main ideas while listening to a newscast and could then decide to take notes (observable) in order to remember the information. In almost all learning contexts, the only way to find out whether students are using learning strategies while engaged in a language task is to ask them."

2. Experimentation

In this step, the students did the listening tasks of the first part and trying out the strategies introduced. Two students, namely S3 and S11, got the best mark in the first phase after the second attempt and in the second phase three students (S3, S5 and S9) got the best mark after the second attempt and one person (S11) after third attempt.

It can be seen from the Table IV that 5 was the lowest score in the two phases. The average score in the first phase is 7.8 and in the second phase 8.1. The systematic strategy training is assumed to be one of the factors causing the average score to increase. This is in accordance with following statement: "Because learning strategy instruction has been shown to improve performance on first language tasks such as vocabulary learning, reading comprehension, and writing, it is likely that it could prove equally helpful for language learners in these and other L2 tasks such as listening and speaking, modalities not investigated in the first language literature."

(Chamot, 2005, p.116). It should also be noted that most students have tried only once. The highest number attempt in the two phases was three times. In terms of total time, students spent more time on average during the first phase than in the second phase.

The use of the quiz feature for the experimentation phase is considered appropriate because this feature allows the instructor to make various forms of questions in accordance with the format of the listening questions used during the exam. Regarding this matter Brandl (2005, p.18) argues: "Moodle allows for a wide range of assessment strategies. The quiz module includes the following response types: fill-ins, multiple-choice, multi-choice (more than one answer can be selected), true-false, matching, short-answer (exact matching). All types are supported with automatic tallying and scoring, based on teacher or student-determined rating scales."

TABLE IV. THE RESULT OF THE STAGE EXPERIMENTATION

Students	Phase 1			Phase 2		
	The best Score	Number of Trials	Total Time	The best Score	Number of Trials	Total Time
S1	7	1	14:30	9	1	14:26
S2	6	1	12:36	5	1	11:38
S3	10	2	20:15	10	2	13:53
S4	5	1	16:37	6	1	11:47
S5	9	3	25:12	10	2	11:47
S6	6	1	24:18	8	1	11:59
S7	7	1	21:38	8	1	11:23
S8	9	2	33:41	6	1	13:30
S9	9	1	20:18	10	2	22:27
S10	8	1	17:47	7	1	13:03
S11	10	2	39:30	10	3	23:41
∑	7,8	1,5	22:13	8,1	1,5	14:30

3. Evaluation

At this step, students should reflect on whether and how the strategies worked. In the two phases, most of the students were not satisfied with the result, because they were unfocused, did not get a good score and found the listening text difficult. Two students were satisfied in the first phase with the result, as S10 was lucky and S11 could understand what the audio text is about. In the second phase, two students confirmed that they were satisfied because they got better results (see Table V).

The options in the first phase are as follows: (1) I will not use this step anymore; (2) The step did not work at all, (3) I will always use this step; and (4) The step worked well. In Phase 2, the numbers are as follows: (1) This strategy is boring; (2) This strategy is time-consuming. (This strategy takes a lot of time); (3) This strategy is pleasant (so that something brings about a pleasing, positive feeling); and (4) this strategy is successful. From the results, it can be seen that almost all students find that the strategies in the first phase either worked or are always used. Only one person (S6) thinks that she will not use general strategy 3 anymore and that strategy 3 did not work for her. In the second phase, it can be seen that the evaluation of the strategies was more diverse. No strategies were rated as boring. Two students (S10 and S11) stated that all strategies were successful and one person (S8) thinks that

all the strategies comfortable. For one person (S5), almost half the strategies were time-consuming. With regard to the last question, most of the students in the two phases confirmed that strategy 1 (keywords tagging) helped them the most. Some have also mentioned that the general strategy 4 (using the second attempt for correction) and strategy 3 (using ten seconds to read and understand short sentences) helped them a lot.

Regarding the use of questionnaires to find out the use of learning strategies, Chamot (2004, p.15) argues as follows: "The most frequent and efficient method for identifying students' learning strategies is through questionnaires. The limitations are that students may not remember the strategies they have used in the past, may claim to use strategies that in fact they do not use, or may not understand the strategy descriptions in the questionnaire items. For these reasons, some studies have developed questionnaires based on tasks that students have just completed, reasoning that students will be more likely to remember and to report accurately if little time has elapsed." In this study, the assessment of listening strategies used took place after students used these strategies. Therefore they can still remember the strategies they have used. The problems related to students' lack of understanding of the strategy descriptions in the questionnaire items can be seen in the second phase of the awareness phase, where most students stated that they understood the description of the strategies provided.

TABLE V. THE RESULTS OF THE QUESTIONNAIRE FOR THE EVALUATION STEP

Q S	Phase 1								Phase 2							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
S1	N	4	4	4	4	4	4	3	J	4	3	3	4	4	4	2
S2	N	3	3	4	3	3	3	3	N	3	3	2	4	2	3	2
S3	N	4	3	4	3	4	3	4	N	4	4	3	3	4	3	4
S4	N	4	3	3	4	4	3	4	N	3	3	4	4	4	3	4
S5	N	4	4	3	4	4	3	4	N	2	2	2	4	4	4	4
S6	N	4	3	1	3	4	3	2	J	4	4	4	3	4	4	4
S7	N	4	4	3	4	4	4	4	N	4	4	4	2	4	4	2
S8	N	3	3	3	3	3	3	3	N	3	3	3	3	3	3	3
S9	N	3	4	4	3	3	4	3	N	4	3	3	4	4	3	4
S10	J	4	3	3	3	3	4	3	N	4	4	4	4	4	4	4
S11	J	3	4	4	4	4	4	4	N	4	4	4	4	4	4	4

IV. CONCLUSION

From the research results one can conclude that the LMS Moodle can be used for a systematic strategy training. However, it would be better if this program does not serve as an optional offer so that more students could benefit from this program. The influence of the type of assignment, in this case compulsory or elective, on student participation in online systematic strategy training as well as in other online language learning programs is potentially a field that needs further study.

The feature questionnaire is appropriate for the awareness step and the evaluation step, because it allows students to reflect on their usual practice and on the strategies that have been tried. In this step, answers from all students are accessible to all. This way, students could learn about different strategies.

Strategies proposed by the teachers could also be introduced at this step. According to Brandl (2005, p.20) advantages from Moodle related to the questionnaire feature are as follows: "Numerous additional features and modules facilitate course management and the learning process. For example, Moodle has several built-in standardized questionnaires that allow teachers to collect qualitative and quantitative feedback on students' learning experiences. A questionnaire module allows teachers to create their own questionnaires."

The use of the feature test in the second step allows students to try out the strategies introduced in the first step by being able to train the processing of listening tasks without the time and attempt limitation. This contributes to the promotion of autonomy learning because students can determine or co-determine their own pace of learning (Bimmel & Rampillon, 2000). Etxebarria, Garay, and Romero (2012, p.274) stated the importance of autonomy learning in foreign language learning and the role of the development of learning strategies in autonomy learning as follows "As the Common European Framework of References for Languages (2002) points out, nowadays the autonomous character of the student for second language learning continues to be encouraged and the development of learning strategies which promote the autonomy of the individual is considered to be very important."

The final step in systematic strategy training is to reflect on the strategies that have been tried. Using the feature *quesionnaire*, students can assess whether the strategies worked well for them and how they find these strategies. In this step, it should also be noted that tagging keywords helped the students the most. They are familiar with this strategy even before the introduction of strategy training. According to Cross as cited in Ballweg et al. (2013) it has been proven that out of habit and convenience, one likes to stick to those strategies that have always been used. This is the case here with the tagging of keywords. However, the students have tried new strategies and find some of them helpful.

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