

Bridging the gap between L2 research and classroom practice (3)

– Online assessment and practical teaching

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Abstract

Recent technological advancements have been changing our educational environments. Because of learning management systems and online communication tools, educators can create and tailor virtual learning environments relatively easily, and they can incorporate new-dimensional approaches into their practical teaching. The inevitable consequence is that L2 learners need to get more accustomed to new types of learning environments. Not only should they know the effective use of computers for their learning, but they have to know how to become more responsible learners. This is because they have more chances to learn English independently in e-learning environments. Many educators emphasize the importance of student-centered and student-oriented learning. However, there are hardly any educational projects or methods that can facilitate the transition from teacher-centered to student-centered approaches. Against this background, the aim of this study is two-fold. First, we will show how we support a new generation of language learners that should become independent learners of English. Secondly, we will present survey results on L2 learners' impressions of our supporting methods.

Index Terms: independent learning, learning management system, self-assessment,

1. Introduction

The recent evolution of Information and Communication Technologies (ICTs) has been changing our educational environments. Learning management systems and online communication tools allow educators in many fields to create and tailor virtual learning environments relatively easily. Against this background, they can integrate new-dimensional approaches into their practical teaching. The purpose of this study is to present how we do that in English classroom.

L2 learners also have more chances to study in e-learning environments and try new types of learning methods. Because the transition from student-centered to teacher-centered approaches has urged them to learn to study English independently, they need to know a wide variety of learning methods and learning strategies. They have to have many choices in order to maintain their learning by themselves. What they should do is to effectively and efficiently use new types of learning methods or strategies.

Another noteworthy feature of technological tools in educational environments is that these systems and tools can provide language teachers with sufficient educational data. These data include learners' test responses, survey responses, and such written data as computer-mediated communication data, journals and writing tasks. Compared to paper-and pencil methods, the data collections and analyses are tremendously

easy and fast. These educational resources should not be wasted, and language teachers need to make use of them in order to become more critical about their teaching plans and curricula.

It is also beneficial to language users, who tend to favor more instant and individualized feedback. Automatic scoring is possible; therefore, the tedious repetition of answering and checking questions can be avoided in classroom settings. This inefficiency not only wastes a lot of valuable time in classroom but also demotivates students.

The aim of this study is three-fold. Firstly, we will show our English course navigation system while describing how we support a new generation of language learners that should become more responsible learners of English. Secondly, we will seek alternative ways of associating this supporting system with Moodle, which is one of the most powerful learning management systems. Finally, we will present survey results on L2 learners' views against our feedback system.

2. Previous studies

Tsutsui et al. (2007, 2008 and 2009) have been developing an online assessment system that targets Japanese basic and intermediate learners of English. In this system, the system users can obtain individualized diagnostic feedback immediately after having answered 51 questionnaire items.

They identified some characteristic features of Japanese learners of English by elucidating such learner characteristics as learning strategies (Oxford, 1989), anxiety (Horwitz et al., 1986), learner preference (Ely, 1986) and motivational orientations. They administered these surveys and obtained about 3000 Japanese learners of English. Initially, the total number of items was more than 100. As far as reliability is concerned, one factor (i.e., one aspect, one testlet) needs to include as many items as possible. It is nonetheless impractical sometimes in educational settings. Therefore, in order to keep a balance between reliability and practicality, our aim was two-fold; (1) to assess many facets (or factors) of learner characteristics in a relatively short period of time, and (2) to save learners from answering many questions that are conceptually overlapped. After their wary selections, they experienced nearly a one-half reduction of the items.

This system consists of three sections, a total of 18 types of diagnostic feedback; (1) nine different types of strategy-regulation capacities, (2) four types of anxiety, and (3) five kinds of motivation. The scores (strengths and weaknesses) are indicated by factor scores that are standardized component scores.

2.1. Strategies Section

In this section, learners will know which strategy components they frequently or rarely use. These components include social

strategies, practical writing strategies, anxiety management strategies, contextualized vocabulary learning strategies, rational planning strategies, grammar learning strategies, decontextualized memory strategies (associating), efficiency-oriented strategies to keep a good balance between accuracy and fluency, and self-training strategies. Our secondary factor analysis indicates these nine factors are reliably subdivided into two components. The first four strategy factors are defined as strategies for holists because these are the strategies that learners with holistic learning styles preferably use. The remaining five factors are strategies for analysts, learners with analytic learning style. In this diagnostic system, if the user uses holistic strategies more frequently than analytic strategies, the person is diagnosed as the holistic type. If the user's analytic component score is higher than the holistic, the person is diagnosed as the analytic type.

One predictable criticism is that some credulous learners might inadvertently make a stereotype for themselves, according to the results they have got. However, it is obvious that humans can adjust their own styles depending on the situation. To warn this, it is clearly stated in this system that they should take the results just as one aspect of their characteristics, and what is even more important is to actively control their learning and themselves.

2.2. Anxiety and discomfort section

In order to maintain your learning, it is inevitable to cope with your negative feelings about English learning. Sometimes you need to remove them and sometimes you just need to accept them. Since nothing can be done if you don't know the problems, our system tells what kind(s) of negative affects can impede your learning.

There are four components for anxiety and discomfort; (1) class avoidance, (2) speech anxiety, (3) in-class anxiety, and (4) procrastinations. Each component score can be observed, and some educational tips to face with these issues are available to the users.

2.3. Motivational section

L2 educators have long been using the terms of instrumental and integrative motivations, which are defined by Gardner and Lambert (1959). Based on Deci's (1980) self-determination theory, the concepts of extrinsic and intrinsic motivations are also accepted widely now. The theory presupposes that one's motivation has some developmental stages, from amotivation to extrinsic motivation, and eventually to intrinsic motivation.

Motivational directions that are observable in this system include (1) instrumental motivation, (2) introjected regulation, (3) identified regulation, (4) intrinsic motivation triggered by intellectual appetite (5) intrinsic motivation triggered by a sense of accomplishment, (6) motivation triggered by cultural stimulations. We referred to Noel's (2000) studies when interpreting each component.

The secondary factor analysis indicates that these six factors can be subcategorized into two components: intrinsic motivation and extrinsic motivation. Therefore, in the similar way as the strategies section, each learner is diagnosed as the intrinsic or extrinsic type. Also, users receive feedback to use a wide variety of motivational strategies to self-regulate their own volitions.

2.4. Feedback

Figure 1 is a captured image of our diagnostic feedback that visualizes individual learner characteristics (in terms of strategy use, anxiety and motivation). Three radar charts are displayed, right after the users have completed all the

questions in the three sections. We are hoping that this feedback system would be a very first step for learners to know themselves and raise their awareness. This is because we sincerely believe Japanese learners need to take feasible actions for confidence development and anxiety management by using a wide variety of learning methods and strategies.

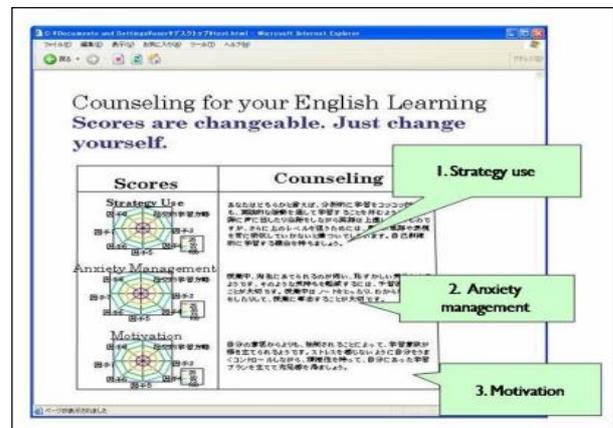


Figure 1: Diagnostic feedback of this system

This kind of system cannot be easily built or customized by anyone without programming expertise. Let us turn our attention to the benefit of Moodle and show how the system can be integrated into Moodle-based teaching.

3. Incorporating our system into Moodle

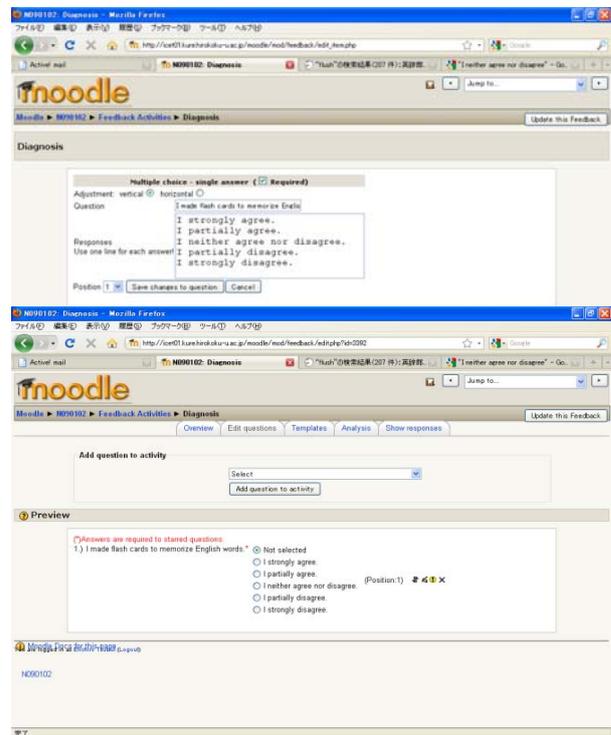


Figure 2: Moodle Feedback Module

Our diagnostic system is partially doable in a Moodle system. In doing so, one of the additional modules should be installed. Therefore, we can usefully adopt a "Feedback Module" that is available at <http://moodle.org/>. By using this, L2 educators can easily make and administer an online survey, and then collect all the responses without any difficulty. Figure 2 shows how a

multiple choice question is created, and how the question is presented to the users.

Tsutsui et al (2009) used this module and had learners evaluate their own self-regulated behaviors (i.e., their active use of learning strategies, motivational control, participations, note-taking and their effective use of dictionaries). This was administered at the end of each class, and their project was working very well.

After learners have completed all the questions, individual learner's results are shown, as in Figure 3.



Figure 3: Individual results

In the area of "Analysis" of figure 4, bar charts represent the numbers of respondents for each option of each item. This is useful because we can look at the characteristics of a whole class or a whole population.

By just pressing "Export to Excel", all item responses can be obtained.



Figure 4: Class results

Factor scores can be calculated by relatively simple arithmetic. Therefore, Microsoft Excel can automatically generate individual component scores, according to individual response patterns. First, formulas should be given in all the columns, where the score results are presented. Second, to visualize the results, charts should be created, like Figure 5.

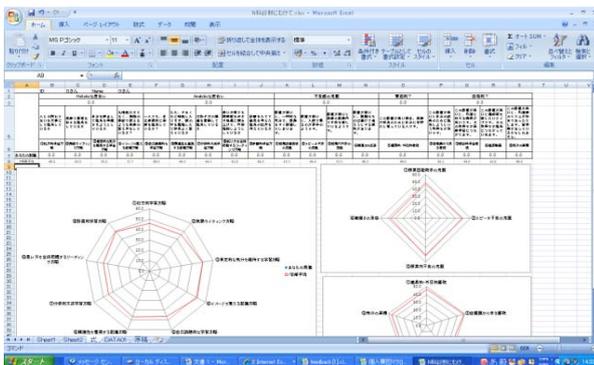


Figure 5: Diagnostic Sheet (1)

After that, you have to do nothing much but copy and paste each person's responses in particular columns and rows, just one time Excel will calculate component scores and create charts for you, as in Figure 6. Colored radar charts present individual learner's scores, and plain ones mean average scores of their department. And, 50 can be regarded as the mean scores of 3000 Japanese learners of English. Therefore, learners can compare their scores not only with the average scores of their department but also with the Japanese average.

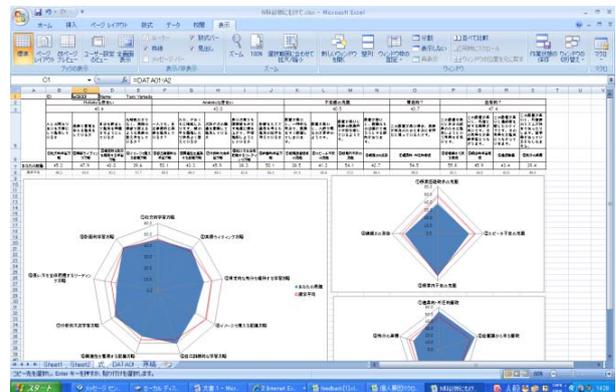


Figure 6: Diagnostic Sheet (2)

This chapter showed how easily L2 educators could create and administer an online survey and eventually provide individualized feedback in classroom environments. Without programming skills, freely-available technology could assist with our creative teaching and new-dimensional assessment methods.

4. Students' Views

This chapter focuses on students' impressions of our on-line feedback system. We examined how they felt about their individualized feedback. The survey asked respondents to evaluate whether or not they find the system reliable, useful and persuasive. It was conducted among 103 university students right after they had received a diagnostic feedback of our online assessment system.

In order to examine the reliability of the system, the respondents were asked whether this diagnosis precisely captures your characteristics. The results are shown in Figure 7.

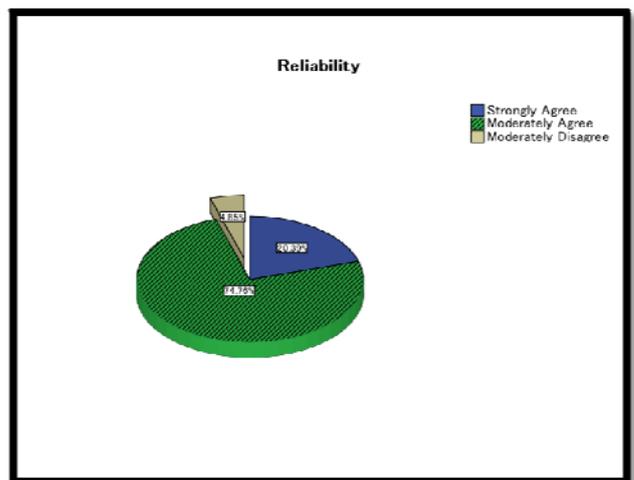


Figure 7: Does this capture your own characteristics?

A large majority (95%) holds positive views. In detail, 21 users strongly agree and 77 users moderately agree with the statement. Only 5 users show moderate disagreement.

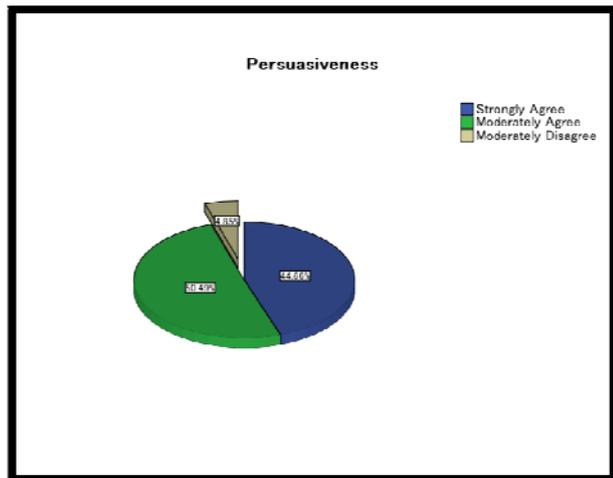


Figure 8: *Are you happy with the results?*

For the purpose of examining the usefulness and persuasiveness of the system, the second question asks whether the respondents are happy with the quality of the feedback.

Figure 8 shows that we also obtain positive views from an enormous majority (95%). 46 learners strongly agree and 52 moderately agree with the statement, although 5 lean to a slightly negative view.

Overall, the survey results indicated our system obtained favorable views from a large majority of university students.

5. Conclusions

This study shows that survey research can be usefully applied in our practical teaching. By using the increasing number of unique ICTs, L2 educators will be able to change their styles of teaching. However, learners will need to adapt themselves to the diverse environments. In other words, they have to become more responsible and independent, and make effective use of learning methods and strategies. We hope our system will be of some help.

By focusing on learner characteristics such as learner styles and preferences, anxiety, and motivational orientations, diagnostic feedback is possible. Because of the use of ICTs, automatic calculations and graphic presentations can be also performed. This helps to save our time and efforts. Of greatest note is that the feedback is given to students instantly. This attracts a great majority of students, because 95 percent of respondents in our survey are positive toward our diagnostic feedback.

6. References

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