

The Development of Poem Instructional Module Based on Dick & Carey's Instructional System Design

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Abstract. The purpose of this study was to develop the Poem Instructional Module Based on Reader Response Approach (PIMBRRRA). The module was developed based on Dick & Carey's Instructional System Design. Dick & Carey's Model was selected because it consists of comprehensive and systematic instructional planning processes, comprising of developmental phases of module development, a thorough evaluation and revision process, and testing process. This study consists of two phases, i.e. the development of PIMBRRRA phase and the Formative Evaluation phase. The development of PIMBRRRA phase adopted steps one through seven of Dick & Carey's Model. The Formative Evaluation phase involved experts in the field of education and Malay language and literature studies, and students. Data was garnered from evaluation forms, and interviews involving three experts, teachers and students. The three categories of respondents had given positive feedback on the module.

Key words: instructional module development, reader response, instructional system design

Abstrak. Tujuan studi ini adalah mengembangkan *Poem Instructional Module Based on Reader Response Approach (PIMBRRRA)*. Modul ini dikembangkan berdasarkan *Dick & Carey's Instructional System Design*. Model Dick & Carey yang dipilih karena mengandung proses perencanaan instruksional yang terpadu dan sistematis, terdiri atas tahapan pengembangan dari perkembangan modul, proses evaluasi dan revisi yang ketat, dan proses pengujian. Studi ini terdiri atas dua tahapan, yaitu pengembangan tahapan PIMBRRRA dan tahapan Evaluasi Formatif. Tahapan pengembangan PIMBRRRA mengadopsi langkah satu hingga tujuh dari model Dick & Carey. Tahapan evaluasi formatif meliputi pakar dalam bidang pendidikan serta bahasa dan literatur Malaya, dan para mahasiswa. Data dikumpulkan dari format evaluasi, dan wawancara terhadap tiga pakar, guru dan siswa. Ketiga kategori responden telah memberikan balikan positif terhadap modul ini.

Kata kunci: pengembangan modul instruksional, respons pembaca, desain sistem instruksional

Instructional design can be defined as a systematic and reflective process which transforms various teaching and learning theories into instructional materials and activities, as well as sources of information and evaluation (Smith & Ragan, 1999). Basically, three main questions have to be taken into consideration in the developing and planning of a systematic instructional design (Mager, 1984). These questions are: what are the main objectives of the instruction, what are the strategies and instructional media to be used, and how is the evaluation on the instructional design to be conducted.

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This study adopted the Dick & Carey's Model as a framework for the development of the Poem Instructional Model. The model is chosen because it translates into practice Landa's (1983) proposal regarding lesson planning. Landa has proposed the significance of three main components in teaching and learning, termed as "*task algorithm*," "*student's algorithm*," and "*teacher's algorithm*." *Task algorithm* refers to the content or competency to be taught, *student's algorithm* focus on the procedures to help students perform the given task or competency, and *teacher's algorithm* refers to teacher's role in conveying a particular lesson or competency. Therefore based on these factors, Landa strongly recommend the inclusion of the three components in any lesson planning.

In this study, Dick & Carey's (1996) instructional design model was used to develop a poem in-

structional module that is based on the reader response approach. The development process of the PSBPRP module involved some adaptation of the Dick & Carey's Model so as to accommodate the local setting and research requirements.

Dick & Carey's instructional design model is comprised of a comprehensive system. There are nine small components in this model that are related to one another. Every component has its own function which plays a vital role in a student's learning process (Dick & Carey, 1996). Dick & Carey's instructional design model is illustrated in Figure 1.

Method

This study is comprised of two phases; namely Phase 1 – Developmental Processes of Poem Instructional Module based on Dick & Carey's Instructional System Design, and Phase 2 – Formative Evaluation Programme. Phase 1 adopted steps one through seven of Dick & Carey's Model, and Phase 2 adopted step eight of the same model.

Phase 1 – Developmental Processes of Poem Instructional Module Based on Dick & Carey's Instructional System Design

In developing the PSBPRP model, this study fully adopted steps one through seven of Dick & Carey's Model. The seven steps are as follows.

Identifying instructional objectives. This early stage aimed to identify the range of instructional objectives. Instructional objectives were formulated through a process that reviewed previous lessons in order to detect problems (Kemp, Morrison, Ross, 1998). When a problem has been identified, instructional objectives can be reorganised by focusing on objectives that need to be achieved and the competencies to be learnt by students by the end of a lesson (Dick & Carey, 1996).

Issues that had cropped up during the pilot study were to identify the main pedagogical problems faced by teachers in the teaching and learning of the Malay literature particularly poem, utilisation of the instructional materials and resources, and the evaluation of students' performance. The pilot study

also obtained data on students' opinion on their teacher's teaching practices, their attitude towards Malay literature subject particularly poem, and the attendant problems.

To gain relevant information on these issues, the researcher had conducted several data gathering methods such as conducting interviews with some teachers and students, observing classes during the teaching and learning of poem, and conducting document analysis such as teachers' record books and students' exercise books.

Conducting instructional analysis. The second step carried out by the researcher in developing the PSBPRP module is to conduct an instructional analysis. Instructional analysis is to identify the various competencies needed by students in order to achieve the learning objectives set (Dick & Carey, 1996). According to Gagne (1985), instructional analysis guides the teacher in identifying competencies that need to be taught in order for students to master the competencies and achieve the set learning objectives. Instructional analysis can also guide the teacher in planning various instructional procedures methodically, as well as integrating content and instructional resources to the maximum. Landa (1983) terms this component of instructional analysis as "task algorithm."

In this study, the selection and organisation of instructional analysis was guided by an instructional model by Gagne-Briggs (as cited in Reigeluth, 1987). Gagne-Briggs was chosen because his theories are comprehensive in clarifying the principles of instruction, the instructional methods for specific competencies as well as learning strategies (Petty, Mouton & Reigeluth, 1987).

Identifying students' entry behaviours and characteristics. Student component is one of the four basic components in the instructional design process. The other three are objectives, strategies and evaluation components (Kemp, Morrison & Ross, 1998). Student component is important because the objectives of instructional design are focused on increasing the students' abilities and competencies, not on completing the syllabus.

The phase of identifying students' characteristics was carried out with the purpose of determining students' characteristics, basic and current knowledge, as well as the students' main obstacles in understanding poems. This information is relevant in

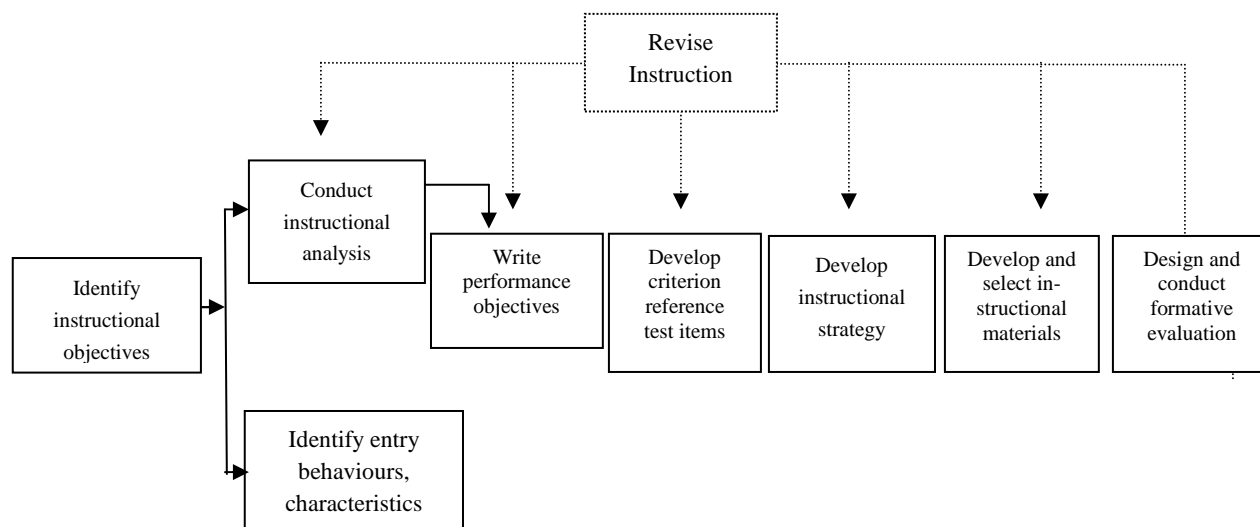


Figure 1. Dick & Carey's model

designing an instruction that comprises an appropriate approach suited to their level of abilities.

To obtain these data, information on student family and academic background such as their personal particulars, learning styles and public examination results, was obtained from the school administration as well as interviews with teachers. Apart from these methods, the researcher had also administered an entry behaviour test (Basic Knowledge on Poems Test or *Ujian Pengetahuan Asas Sajak*) to participating students. This is conducted to gauge their basic knowledge and understanding of the basic concepts in analysing a poem.

Writing of performance objectives. The following step was to define the general instructional needs and aims into instructional objectives that are more specific (Dick & Carey, 1996). These objectives were written in categories of measurable behaviour. According to Kemp, Morrisson & Ross, (1998), lesson objectives have three functions namely as guidance for teachers to select and organise the content, instructional aids and instructional strategies, to formulate ways to evaluate students' progress, and lastly is as guidance for students in identifying the competencies and knowledge they have yet to master.

The identification of performance objectives was based on the Form Four Malay Literature syllabus Kurikulum Bersepadu Sekolah Menengah, 2003). The identification of performance objectives were

conducted in three stages i.e. the Main Learning Outcomes stage (*Hasil Pembelajaran Utama* or HPU), Specific Learning Outcomes stage (*Hasil Pembelajaran Khusus* or HPK) and Learning Outcome Report (*Huraian Hasil Pembelajaran*) (level of attainment).

Building criterion references. Based on the short listed learning outcomes, three sets of tests based on PSBPRP module were developed. The tests were comprehension test, internalisation test and final test on poem. The comprehension and the internalisation tests were administered as pre-tests i.e. before the module was taught, as well as post-tests i.e. after the module was completed. The comprehension and the internalisation tests were conducted to gauge the effectiveness of the lessons based on the PSBPRP module. The final test was administered to gauge the students' ability in critically analysing poems, and on the literary conventions learnt.

All tests were developed to evaluate students' knowledge, increase students' competencies and to address their affective needs. The comprehension and the internalisation tests for poems were developed based on the Barret Taxonomy. Barret (1972) has developed a model for formulating comprehension questions based on two domains, namely the cognitive domain and the affective domain. As for the final test, it was built by the researcher and the participating teachers according to SPM format.

Develoing instructional strategies. The Poem

Instructional Module was developed mainly based on the reader response approach (Rosenblatt, 1978). Therefore stage six and seven in the developmental process of the module i.e. the instructional strategies and the selection of instructional media, fully adopted the reader response approach.

In planning the instructional strategies, five factors were taken into consideration. They were set-induction activities, content instruction, students' involvement, testing and enrichment activities and remedial measures. The PSBPRP module was developed with these factors in mind, based on the reader response approach. Equal attention was given to the three stages of each lesson, namely the set induction stage, instruction of content and the conclusion stage. This is a strategy to sustain students' interest, involvement and attention throughout the lesson.

Developing and selecting instructional media. The seventh step of the Dick & Carey model is to develop and select instructional media. Media refers to whatever materials and resources that would assist instruction. A teacher can choose to use readily available media, or build his/her own instructional media. Therefore the role of the teacher in the lesson largely depends on the type of media chosen. In choosing the instructional media, factors that need to be considered are the availability of the media, management of the media, durability of the media and the costs involved.

Phase 2 – Formative Evaluation Programme

The final draft of the PSBPRP module was then subjected to a formative evaluation programme. Formative evaluation involves a process of evaluation and revision of the module (Kandaswamy, 1980). At this phase, the process involved collection of data on the strengths and weaknesses of the module, amendments on incomplete or inefficient procedures, and getting feedback from experts in improving the module (Borg & Gall, 1983). Feedback was used to improve the quality and increase the effectiveness of the instructional programme developed (Dick & Carey, 1996). The evaluation process involved three stages i.e. evaluation by experts, evaluation by teachers, and evaluation by students.

Experts involved in this stage were lecturers in instructional design, in Malay Literature Studies in Education, and in Malay Poems. The three scholars evaluated the module based on its design, user-friendliness and content.

Teachers who had participated in this study were those who had more than seven years of experience in the field. They had evaluated the module based on the relevance of the content with the syllabus, time management, teaching and learning tasks, selection of instructional media and students' ability to follow the lesson. The evaluation programme involving students went through three stages, as suggested by Dick & Carey (1996), namely one to one, one to eight (small group) and a group of 30 students (pilot study).

One to one evaluation involved the researcher sitting face to face with the student. Evaluation at this stage is focused on technical aspects e.g. the terminology used, the accuracy of the instructions and the suitability of the content. A small group evaluation was conducted by the researcher with a group comprised of eight students. For this stage, the students had engaged in tasks as suggested in the module. Evaluation involving a group of 30 students was conducted to verify its applicability in real classroom settings. At this stage, the compatibility of time and task, appropriate activity with students' level of ability, and mastery of competency and content at the end of the lesson can be observed.

To evaluate the suitability of the design and content of the module, a set of evaluation forms were distributed to the experts, teachers and participating students. The purpose of the evaluation forms is to gather opinions and feedback from the three parties involved. The items in the evaluation form were developed based on the learning concepts as proposed by Sekaran (2003), and the nine instructional steps by Gagne (1985).

Results

Three experts were involved in the review of the instructional module developed. The first was an expert in instructional design, the second in the Malay Literature Studies (specialising in Malay Poems) and the third was an expert in Malay Literature Studies.

dies in Education (pedagogy). The three experts had conducted extensive reviews on the module, and were satisfied with the design, content, and instructional procedures developed. Nonetheless, several suggestions and recommendations were given to improve the module's effectiveness in practice.

Based on the evaluation and feedback by the four teachers involved in this study, they had given positive reviews and were generally satisfied with the content of the PSBPRP module. The PSBPRP module was said to be interesting due to its variety in activities and instructional aids. According to the teachers, this factor will motivate students to become more involved in the teaching and learning process.

Research findings have shown that the students had enjoyed learning based on the PSBPRP module. Through this module, they had the chance to voice their opinions, engage in group discussions and exchange ideas with their friends. Moreover, according to the students, the clear instructions and interesting activities had helped them to understand the content better. Enrichment tasks and activities had also allowed them to be expressive and creative.

Conclusion

In education, to promote teaching and learning objectives, an educator is required to develop an effective instructional system that efficiently integrates several main components such as instructional material, instructional objectives, students, strategy and approaches (Dick & Reiser, 1999). Therefore there is a necessity for instructional technology that cannot be denied. Instructional technology is a systematic planning process that defines a way to organize the teaching and learning process towards effective achievement of the planned learning outcome.

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