

The Development Model of Synchronization of Teaching-Learning Indonesian Language and Literature Using *Quantum Learning* Approach

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ABSTRAK

Makalah ini menghuraikan prinsip *quantum learning* dalam pelajaran-pembelajaran bahasa dan kesesatan, iaitu satu kaedah yang dikembangkan melalui penyegerakkan (synchronizing) proses tersebut dengan suasana orkestra (diiringi oleh muzik). Data untuk membina prinsip ini dikutip daripada penyelidikan berterusan dan intensif di tujuh buah SMP (Sekolah Menengah) di Provinsi Surakarta, Indonesia, sejak tahun-tahun 1990-an. Penyelidikan ini mendapati kejemuhan dalam kelas dalam kalangan pelajar, terutamanya semasa sesi mata pelajaran bahasa dan kesusasteraan, boleh dikurangkan dengan mencipta suasana orkestra kerana dapat membangkitkan tumpuan, minat dan motivasi pelajar. Kepraktikalan dan kebergunaan kaedah ini dalam proses pelajaran-pembelajaran, terutamanya mata pelajaran yang kering dan menjemukan, dapat dibuktikan apabila hasil penyelidikan ini telah diterbitkan sebagai buku teks dengan dibiayai oleh pihak berkepentingan (terutamanya pihak berkuasa) di Provinsi Surakarta dan terima oleh pihak berkuasa untuk dijadikan buku teks di SMP dalam provinsi tersebut.

Kata kunci: *Quantum learning*, penyegerakkan (synchronizing), suasana orkestra, pemilihan bahan-bahan sastera, dan pihak-pihak berkepentingan.

ABSTRACT

This paper elaborates the principle of *quantum learning* in the teaching-learning of language and literature, a method that has been developed by synchronizing the process with the orchestral atmosphere (with musical accompaniment). Data for configuring the principle were collected from the continuous, intensive research undertaken in seven SMP's (Junior High School) in Surakarta Province, Indonesia, since the 1990s. It is found that the boredom among the students in the classroom, especially during the teaching-learning of language and literature sessions, could be lessened by creating orchestral atmosphere as it could arouse the students' attention, interest, and motivation in learning. The

practicality and usefulness of this method in the teaching-learning process, especially of 'dry,' boredom subjects such as language and literature, is proven by the result of this research which had been published by the support of stakeholders (especially the authority) in Surakarta Province and being accepted by the authority to be used in the SMP's in the province.

Key words: *Quantum learning*, synchronization, orchestral atmosphere, choice of literary works, and stakeholders.

Introducion

This paper is a response to some complaints aroused by teachers of Indonesian language and literature from several scientific forums and discussions. They say there are difficulties in their task in teaching Indonesian language and literature to students in the SMP's. A preliminary survey showed that the problems were related to three elements, the students, the textbooks, and the teachers. The difficulties concerning the student were: 1) their boredom in studying Indonesian language and literature, 2) their difficulties to understand and internalizing poetry and drama, and 3) their boredom in learning to listen, to speak, to read, and as well as to write.

From our observations in the class rooms, it had be found that some of the difficulties concerning the textbooks were: 1) they were less contextual, 2) the learning materials were less interesting, because they were not of the students' psychological age and development interests, and 3) the way of presenting the materials were also boring⁻ *vis.*, the language and technique of presentation were flat or dull.

While concerning the teachers, the difficulties were: 1) how to prepare good, complete, and interesting-for-the-students lesson plans; 2) how to evoke the students' interest and motivation in studying, 3) how to overcome the situation of 'freezing' or 'coldness' in class because the school had not enough teachers to develop the teaching materials and media.

Based on our surveys, the boredom in the class room especially in teaching-learning ability to use language could be lessened by a proper synchronizing teaching-learning Indonesian language and literature. By this, the literary material should be used together with language skill training, namely, lis-tening, speaking, reading, and writing. To arouse the energy of attention, interest, and motivation, the teaching-learning can be made passionate and attractive with music illustration. But the music illustration must agree with the piece of work of literature that was used

as reading and gave spirit to the students when they were exercising the language. Therefore, it was worth trying the principle of making use of the language and working the literary work synchronically with the orchestral atmosphere (with musical accompaniment). The orchestral atmosphere (it is hoped) could arouse the students' attention to learn Indonesian language and literature. This approach is called *quantum learning*.

The word *learning* is chosen here in order to show that the process of teaching-learning culture make the students active, and evoking student's spirit, enthusiasm and power of attention. This process could enable the students implant (*tanamkan*) the learning material within themselves. It enables the students to self-experience (*alami sendiri*) what they have learned. It enables the students to name (*namai*) their activities. It enables the students to demonstrate what they have learned and been perceived as the outcome of their own effort, and if the outcome is interesting enough, the students will love to perform it again and again (*ulangi*). Being satisfied with their performance, they then would celebrate (*rayakan*) their success. And would have hope for a better future. This *quantum learning* principle was created by Nyoman Degeng (2005).

Choice of Literary Works

The second part of this paper are on: 1) How to get the responses from the stakeholders towards accepting the synchronization of teaching-learning of Indonesian language and literature mentioned above, 2) How to develop the teaching-learning model into a prototype textbook, 3) How to develop the prototype textbook into mass-production of textbooks, and 4) How to know the acceptance of the stakeholders for the textbook which had been validated.

Those problems are related to the suitable choice of literary works to be used as teaching-learning material. The researchers analysed what had being done by *Tim Seleksi Karya Sastra untuk SMP*, a team organized by Balitbang Depdiknas (the department's research office) in 1994 to select suitable teaching language and literature material in the SMP. The following are examples of poems selected by the team as to be used in the secondary schools in Indonesia: *Surat dari Ibu* by Asrul Sani, *Doa* and *Diponegoro* by Chairil Anwar, *Balada Terbunuhnya Atmo Karoo* by Rendra, *Selamat Pagi Indonesia* by Sapardi Djoko Damono, *Perempuan-perempuan Perkasa* by Hartoyo Andangjaya,

Pahlawan Tak Dikenal by Toto Sudarto Bachtiar, *Hi/ang Ketemu* by Sutardji Calzoum Bachri, and *Cipasung* by Acep Zamzam Noer.

The following are the short stories being selected by the team to be taught in secondary schools in Indonesia: *Kado, Perkawinan* by Hamzah Rangkuti, and *Jakarta* by Totilawati Citrawasita. And for the teenager novels, they are: *Lupus* by Hilman Hadiwijaya, *Lima Sekawan* by Enid Blyton, and *Seperti Bintang* by Regina Feby. Others are abridged novels such as *Siti Nurbaya* by Marah Rusli (abridged by Herman J. Waluyo), *Salah Asuhan* by Abdul Muis (abridged by Herman J. Wajuyo), *Ave Maria* by Idrus (abridged by Herman J. Waluyo), and *Belunggu* by Armijn Pane. For the drama, the selected texts are those that have been abridged such as: *Ayahku Pulang* by Usmar Ismail, *Pengantin* by Anton Chekov, *Lutung Kesarung* by Herman Waluyo, and *Satria Baju Putih* by Ernanto.

Those literary works cover wide range of themes. The themes presented in the poems are: deity, humanity, love, justice, heroism, patriotism, fatherland, nature's beauty, and struggle for life. Of the short stories and novels, they are both more or less the same: love, humanity, justice, good conduct, ethics and morals, and good versus evil. Of the chosen dramas: humanity, good conduct, struggle for life, human relationship, life's comedy, and good versus evil.

The above selected literatures should be in line with the method proposed by Moody (1979), that the choice (in this case, teaching-learning material) should conform to the students' age, psychological development, and socio-cultural back-ground. As a matter of principle, the teaching process should use quite interesting literary material, if not the learners will have no interest in studying any literary work. So, the language of the literary should be simple, easy to understand both by the students as well as by the teachers. The literary material chosen should have sharp conflicts so that they would have the power to attract students' interests.

Quantum Learning Approach

Internalizing literary work is not only by reading. There are other means, and one of them is the use of *quantum learning* principles: proposing different presentation and delightful learning (Degeng, 2005, 3). Students can do these by: recite poems, create music for poems, write poems after a model, stage or perform dramas. In drama, they could do that by reading, paraphrase, dramatize novels or short stories, write literary

critiques, and composing role-plays from dramas or novels after they have read them. Those activities can be done individually or in group. Other principle in *quantum learning* approach is learning with orchestral accompaniment. The utilization of music could be the power of catalyzing students' interest and motivation (Degeng, 2005, De Potter, 1992; Lozanov, 1978). A careful choice of the kind of music— such as harmony with the literary work and language learning— will arouse the students' interest and motivation. The power of volume has to be controlled as not to overcome speech.

Besides, De Potter (2003) and Degeng (2005) suggested the theory of *Tandur* within the *quantum learning*. It is a theory of learning which enable the students: 1) to implant (*tanamkan*) the information in their mind, 2) to experience (*alami sendiri*) what they have read from the material in their learning process, 3) to name (*nama*) what they have acquired from the learning process so that what they have learned could become a *long term memory*, 4) to demonstrate (*demonstrasikan*) their competence obtained from their learning so that the competence is embedded in the students' minds, 5) to repeat their competence (*ulangi*) obtained from their learning so that it becomes more internalized, and 6) to celebrate (*rayakan*) that they have succeeded in their learning process— new competence have been reached.

Methodology

Kind of Research

This research is a developmental research, a kind of qualitative one (Research and Development) (Janali, 2006; Nana Saodih, 2006; and Brown& Gall, 1979). In developmental research, firstly, the theory is developed into prototype. Then, the prototype is developed into model. Finally, the model of learning is developed into textbook.

In the research Stage II the teaching-learning model should be developed into the initial material for the textbook, or, according to Janali, the initial product (Janali, 2006). The form of the initial model are obtained from the theoretical concepts, namely, through the process of preparation and exploration (Jan a Ii, 2006). In this research (Stage II), the initial model is developed into synchronized Indonesian language textbook through four steps: 1) *expert judgments*, 2) initial field try-out, 3) real field try out, and 4) operational field try-out (Janali, 2006). All try-out

materials are accompanied by revision after some reflections by the teachers and the researchers.

The Data and Data Collecting Techniques

This research uses the quantitative analysis to test the effectiveness of the model in the third and fourth phase by Mest non-independent. Actually, the quantitative analysis is minor. Most of the analyses are using qualitative method. Therefore, the qualitative data are plenty.

The qualitative data are in the form of the needs of the teachers in teaching Indonesian language and literature (covering poems, short stories, novels, and dramas); handbook for language exercises (listening, speaking, reading, and writing), theory exploration data, model development (poems and exercises, syllabus, music for illustration in quantum *Teaming*, response from expert in *expert judgments*, try-out I and try-out II (carrying out data), revision data of the model, and responses data of the stakeholders towards the model).

In principle, the learning process covers: 1) great participation of the students, 2) arousing the students' interest and motivation, 3) building the students' feeling of togetherness, 4) arising and maintaining the students' memory; and 5) stimulating good listening power of the students (De Potter, 2003:5).

De Potter (2001:4) says *quantum* has the sense of "changing energy to light." By this it means that in teaching-learning the interaction among three factors of teaching-learning *viz.*, teachers, students, and teaching material involve deep interaction so that what is presented in teaching process can be absorbed optimally by the students.

The principle of constructivism philosophy in this teaching-learning process lies on five elements proposed by De Potter (2003:4749), namely: 1) all components involve in speaking, 2) clear and open objectives for all, 3) internalizing previous experiences (before learning), 4) any effort that the students make must be appreciated, and 5) any success in learning must be celebrated.

Quantum learning is related and relevant to *contextual teaching and learning* (CTL), which is the basis of KBK and KTSP, because it is stated in KBK and KTSP that *quantum learning* content must always be connected to context. The orchestration composed to accompany the learning must also be in harmony with the context of students and teachers. Thereby, students and teachers can work together in internalizing the material (De Potter, 2003:145).

The technique of obtaining the qualitative data is a library study, document study, interviews on basic issues, participation and non-participation observations, and *Focus Group Discussion* (FGD).

Quantitative data of the ability to use Indonesian language (listening, speaking, reading, writing) culture be obtained through tests and tasks. Reading and listening is carried out by using test, while speaking and writing is carried out by using tasks (the tasks to speak, and to write essays). The score should on the average score of the four language skills

Technique of Choosing the Location

Since teaching-learning using certain approach is difficult to carry out, the choice of school is done by purposive principle, ability to carry out, and willingness to cooperate. Based on the objectives, the schools must have teachers who have undergone training on innovative teaching-learning approach based on constructivism philosophy. Moreover, they must have good vision on teaching-learning innovation. Therefore, the following schools have been chosen:

Surakarta	: SMP Negeri 3, SMP Negeri 10, SMP Negeri 26
Sukoharjo	: SMP Negeri 1, SMP Negeri 2, SMP Negeri 4
Nguter	: SMP Negeri 3, including the assigned teachers: SM, KB, SY, EP, SH, KT, and IH.

The teachers involved are those who have undergone *quantum learning* given by the researchers.

Experts and Stakeholders

The people involved in this research are experts in educational technology, education, literature (they are, to mention a couple, Prof. Dr. Setyo Yuwono Samadikun and Prof.Dr.Samsi Haryanto), and teachers of the Indonesian language in SMP's. While the stakeholders were officials from the Ministry of National Education, Regional Offices (Dings Depdiknas Kabupaten and Kecamatan); and Headmasters of all SMP's in Surakarta.

Technique of Data Analyses

Qualitatively, the data analysis is done using *interactive analysis model* proposed by Mines and Huberman (1984) with the following steps: 1) data reduction, 2) data display, and (3) conclusion and verification. Figure 1 represents the technique of data analysis proposed by Miles and Huberman:



FIGURE 11.1. Interactive Data Analysis (Miles & Huberman, 1984)

Quantitatively, the analysis is done by using *t-test non-independent*. By so doing, the value of the t_o is compared to the value of $t\text{-table}$. If the value of $t_o > t\text{-table}$, the hypothesis is accepted; it means that the approach that been tried out is effective.

The *t-test non-independent* formula is as follows:

Legend-

-0: average score of post test score minus pretest score

0^2 : the square of post test score minus pretest score

o : post test score minus pretest score

N : the number of sample

Research Procedure

The research procedures of this research stage II are as follows:

- a. Organizing FGO in order to get answers whether the Indonesian language textbook resulted from this research stage II was accepted or not by the stake holders.
- b. Developing the model into the prototype (initial model) textbook by preparing, exploring, and editing the initial product.

- c. Developing the initial product textbook into final textbook using four steps, namely, 1) *expert judgments*, 2) the first field development and revision, 3) the main field development and revision, 4) the operational field development and revision. At steps 3 and 4, statistical test is done (*t-test*) to test the effectiveness of the Indonesian language textbook which has been developed.
- d. Consulting with the stakeholders. The acceptance of this textbook produced for the teaching-learning Indonesian language and literature determined by the stakeholders in Surakarta region. So, at the final stage of the research an FGD together with the stakeholders are organized to offer the has-been-tried-out text book.

The Result of the Research and Discussion

Some of the main achievements of this research are: 1) the stakeholders kindly accept the textbook entitled *Bahasa dan Sastra Indonesia* which has been developed using *quantum learning*, 2) through preparation, exploration, and editing the material, initial product of the synchronized, textbook *Bahasa dan Sastra Indonesia* has been produced, 3) through development and 4-steps validation, namely, expert judgments, limited try out and revision, main try-out and revision, operational try-out and revision, and test of the effectiveness of the textbook, then the synchronized textbook *Bahasa dan Sastra Indonesia* using *quantum learning* approach is the outcome 4) through FGD it is agreed that the textbook is accepted, although it is with a comment to improve the printing technicalities.

Conclusion

The involvement of the students in the process of teaching-learning activities is crucial. The teacher, then, as the creator of the scenario, motivator, and creator, must be innovative and creative in teaching--learning in the class. A class is as a laboratory where teachers learn to get experience as much as possible for the sake of enhancing their teaching. The synchronizing of teaching-learning language and literature can give new atmosphere in teaching-learning so that the process is not "dry," boredom and mechanistic. Literary teaching material can be varied in different forms of activities so that it can activate the students to participate in class and arouse attraction so as to suppress boredom.

The *quantum learning approach* which utilizes the orchestral process in teaching-learning activity can increase the students' participation in processing information. Students' interest and motivation can be increased because their role in class is appreciated. Variation of activities can also prevent the students from boredom caused by their teacher's way of teaching. On the contrary, if the students are full spirited toward achieving their goal, they will celebrate their success. The textbook (*Bahasa dan Sastra Indonesia*) produced from this research has been supported and accepted by the stakeholders in Surakarta region to be used for the SMP's in the region. This is a self-evident that using *quantum learning approach* is a success, practical and useful, method in the teaching-learning process, especially in "dry," boredom, subjects such as language and literature.

Reference

- Barlas, Lisa. Campbell, Ann & Weeks, Heidi. 2005. *How Quantum Learning Teaching Strategies Affect Learners*. (In: <http://www.quantumlearning.com/gresearchIWestfieldmiddlescool.doc>). Accessed 2 Nov. 2005.
- Degeng, Nyoman S. 2005. "Orkestra Pembelajaran". Makalah. Disampaikan pada Diskusi Ilmiah peningkatan instruksional, PPS-UNS. 30 November 2005.
- De Potter, Bobbi. 1992. *Quantum Learning*. New York: Dell Publishing.
- . 2001. *Quantum Quotient*. Bandung. Nuansa Cendekia (terjemahan Agus Nggermanto)
- . 2002. *Quantum Teaching. Memraktekkan Quantum Learning*. Bandung: Kaifa (terjemahan Ary Nilandari).
- . 2003. *The Impact of Quantum Learning*. New York: Dell Publishing.
- Herman J. Wajuyo. 2002. *Penelitian Pendidikan Bahasa dan Sastra*. Surakarta: UNS Press.
- Janali, Soepeno, dkk. 2006. *Pengembangan Inovasi Pendidikan*. Jakarta: Ditjen Dikti Depdiknas.
- Miles, M.B. and Heberman, A.M. 1984. *Qualitative Data Analysis*. Beverly Hills: Sage Publication.
- Moody, H.L.B. 1979. *The Teaching of Literature*. London: Routledge Keagan Paul.
- Reeder, Shelby. 2003. *Making Quantum Leaps in Learning* (<http://www.learningforum.com/article.htm>)
- Yus Rusyana. 1978. *Kegiatan Apresiasi Sastra Murid SMP Jawa Barat*. Jakarta: Pusat Bahasa.