

The Implementation Of Instructional Materials Development Based On Inside Outside Circle (IOC) For Students' Sociology Education Of Megarezky University

Akhiruddin¹⁾, Sujarwo²⁾
Universitas Megarezky, Indonesia^{1, 2)}
akhiruddin114@gmail.com

Abstract. Inside Outside Circle (IOC) is the inner - outer circle group that emphasizes students' activities to be active in sharing information with their group of friends. This research aimed to develop instructional materials based on inside-outside-circle (IOC) in sociology students of Megarezky University. The development model used is Four-D Model which consists of 4 stages of development namely define, design, develop and disseminate. The instruments of this study used observation, questionnaire, test and documentation. The result of the research showed that IOC model had good quality which met valid, practical, and effective product criteria. It can be concluded that IOC model is one of the improvement from cooperative learning model. Based on practicality, lecturers of teaching and learning can implement IOC learning model in universities (classrooms). Then all students achieved individually in teaching and learning courses, it means that students' learning outcomes reached the classical graduation criteria that had been set, that was 100% of students passed. It means that they met the criteria that set the teaching and learning course. It shows instructional materials with IOC model that had been developed consisting of semester lesson plan (RPS), students learning outcomes assessment sheets (LPHBM) that can be used in teaching and learning courses in general and especially in sociology education of Megarezky university.

Keywords: *Development of Learning Devices, Inside-outside-circle (IOC) model, Instructional Material,*

Abstrak. Model pembelajaran berbasis Inside Outside Circle (IOC) adalah kelompok dalam-luar lingkaran yang menekankan kegiatan mahasiswa untuk aktif dalam berbagi informasi dengan teman-teman kelompok mereka. Penelitian ini bertujuan untuk mengembangkan perangkat pembelajaran berbasis IOC pada mahasiswa pendidikan sosiologi Universitas Megarezky. Model pengembangan yang digunakan adalah Model Empat-D yang terdiri dari 4 tahap pengembangan yaitu mendefinisikan, mendesain, mengembangkan dan menyebarluaskan. Instrumen penelitian ini menggunakan observasi, angket, tes dan dokumentasi. Hasil penelitian menunjukkan bahwa model IOC memiliki kualitas baik yang memenuhi kriteria produk yang valid, praktis, dan efektif. Dapat disimpulkan bahwa model IOC adalah salah satu perbaikan dari model pembelajaran kooperatif. Berdasarkan kepraktisan, dosen pengajaran dan pembelajaran dapat menerapkan model pembelajaran IOC di universitas (ruang kelas). Dan kemudian semua mahasiswa berprestasi secara individu matakuliah Belajar dan Pembelajaran, itu berarti bahwa hasil belajar siswa mencapai kriteria kelulusan klasik yang telah ditetapkan, yaitu 100% siswa lulus, mahasiswa memenuhi kriteria yang menetapkan pengajaran dan pembelajaran tentu saja. Ini menunjukkan bahan ajar dengan model IOC yang telah dikembangkan terdiri dari rencana pembelajaran semester (RPS), dan lembar penilaian hasil belajar siswa (LPHBM)) dapat digunakan dalam pengajaran belajar dan pembelajaran pada prodi pendidikan sosiologi Universitas Megarezky

Kata Kunci: *Pengembangan Perangkat Pembelajaran, Model inside-Outside-Circle (IOC), Bahan Ajar*

INTRODUCTION

The main of problem in this study is the fact that the existing learning model so far does not pay attention to student traits. The assumptions used by teachers or lecturers that all students have more or less the same characteristics bring consequences on the provision of the same learning treatment thereby reducing their opportunities to develop based on the different characteristics that they have in the class. The instructional material is a number of materials, tools, media, instructions and guidelines that will be used in the process of achieving the desired activity. Learning model based on inside-outside-circle forms inner and outer circle group focusing on students' activity to share information by theme and use space time every circle turns. In addition, the learning based on inside-outside-circle focusing on constructivisme approach based on belief that students constructs concep understanding to expand or modify background knowledge. Inside outside circle involves cooperative values and active students' role in learning process.

Instructional materials have been defined and explained in several ways. According to Eniayeju (2005) stated that instructional materials as materials which provide concrete experiences which a learner needs in order to develop intellectually. They are also defined as materials capable of achieving the objectives of the concept to be taught (Adebimpe, 2005) Instructional

materials play the role of a stimulant in the teaching and learning process. They introduce a learner to first hand materials and convey a precious quality of intimacy (Amadi, 2002). Development of instructional material is a series of process or activity to produce instructional material based on exist development theory. The instructional material is a series of media or mean used and prepared by lecturer and students in learning process at the classroom. The result of the study on problems of improvisation of instructional materials agreed with Eshiet (2001); Igwe, Arop and Ibe (2013) which revealed that the problems teachers have in improvisation of instructional materials relate mostly to their failure to give thought on what to construct, functionality and precision of the instructional materials, motivational and financial problems.

Here, the researchers limit development of instructional material as follows:

Semester lesson plan is a document of learning planning arranged as guide of students to carry out the lectures during one semester to achieve fixed passing learning outcomes. According to Government regulation number 32 year 2013 which is refinement government regulation number 19 year 2005 about the national educational system. Learning planning is organization of implementing learning for each learning content. The semester lesson plan is appointed and developed by lecturers individually or

group based on skill group of knowledge or technology in study program

Learning assessment is one of high education national standard based on regulation of ministry of research, technology and high education of Indonesia republic number 44 year 2015. There is question about method used to assessment students that integrated to learning process in internal audit (AIMS) of study program. Does it use method: teacher assessment, portofolio, students, peer-assessment and self-assessment? The question focuses on assessment technique, whereas assessment rubric is assessment instrument used by lecturer. Technique and assessment instrument are one of aspects in process assessment and students learning outcomes. In addition those are principle of assessment, mechanism and assessment procedure, assessment implementation, assessment reporting and students graduation. The six aspects are on article 19, paragraph 2, regulation of research, technology and high education ministry number 44 year 2015.

Inside Outside Circle Learning is a learning model developed by Spencer Kagan to provide opportunities for students to share information at the same time. Inside Outside Circle Learning develops an innovative and varied learning, Lie (2008: 65). Furthermore Hamzah et al (2010: 128) states that Inside Outside Circle is learning that requires students to share information with each other at the same time with different pairs briefly

and orderly with the inner circle and outer circle pattern. Beside that According to Sujarwo et al in Spencer Kagan (2019) stated that IOC is a learning model with a system small circle and big circle. From all these meanings it can be concluded that the Inside Outside Circle learning model is in the form of inner and outer circle groups that emphasize the students' activity to be active to share information with their friends and to use a time span each time a cycle turns.

RESEARCH METHODS

This research was conducted through research and development (R & D) which is a research method that aims to produce certain products and test the effectiveness of these products (Sugiyono, 2013: 297). This research development aimed to develop instructional material such as semester lesson plan (RPS) and students learning outcomes assessment sheets (LPHBM). Population was all students of branch 2017 at teacher training and education faculty of Megarezky university. It consisted of 251 students involving four study program namely elementary school and teacher education (PGSD), sociology education, English education and physical education. The number of sample was 28 students on teaching and learning subject. Technique of taking sample was purposive sampling. The place of research was Megarezky university cooperated with State University of Makassar. In this procedure, the

researchers used model of instructional material development stated by Thiagarajan and Semmel (1974) called 4-D model (four-D model). This model consisted of four developments namely define, design, develop and disseminate.

Here is definition of research and development steps.

1. Define aimed to set and define learning needs by analyzing the aims and scope of materials.
2. Design. This step was used by preparation of test and the beginning design of instructional material based on inside-outside-circle (IOC)
3. Development aimed to produce a revised draft of instructional material based on expert and data obtained from trial. The activities in this step were experts' assessment, simulation and field trial.
4. Disseminate was a research doing distribution of development product of instructional material for lecturer and students at Megarezky university, especially for teacher training and education faculty through disseminaton that aimed to know effectiveness of device use in learning process.

DISCUSSION

Semester Lesson Plan (RPS)

Arrangement of semester lesson plan was oriented on inside-outside-circle learning which including semester lesson plan, time

allocation, competence standard, basiccompetence, indicator, subject matter, learning approach, learning source, learning activity and assessment. By considering breadth of material delivered, teaching and learning subject needed different meeting. There was one meeting in each chapter and were two meetings in one chapter. Every meeting has time allocation 2x50 minute from 14 times meetings by 11 chapters.

There was learning activity presented by outline focusing on learning steps based on inside-outside-circle learning including students' motivation, presenting infomation and involving students to comprehend contextual problem, organizing students into group and giving group task, guiding group work and learning, discussion and negotiation, evaluation and appreciation.

Table 1.1 The Result of Validation for Semester Lesson Plan

No	Aspect	Mean Score of Validator I	Mean score of Validator II	Mean score
1	Format RPS	3,81	3,98	3,89
2	Materials to be Presented	4,07	3,93	4,00
3	Learning Activity	3,87	4,02	3,94
4	Language	3,91	3,95	3,93
Total Mean score		3,92	3,97	3,95

Based on table 1.1 above, it was obtained that assessment mean score of validator I was 3,92 categorized as valid and mean score of validator II was 3,97 categorized as valid. Total of mean score for validator I was 3,92 and validator II was 3,95

categorized as valid. By matching mean score (x) and category, semester lesson plan developed was categorized as valid by needing little revision for explanation.

Tabel 1.2 Validation Result of Students Learning Outcomes Assessment Sheet (LPHBM)

No	Aspects	Mean Score of Validator I	Mean Score of Validator II	Mean score
1	Instruction	3,77	4,11	3,94
2	Content eligibility	4,23	3,91	4,07
3	Language	3,83	4,06	3,94
Total Mean score		3,94	4,03	3,98

Based on table 1.2 above, it was obtained that assessment mean score of validator I was 3,94 categorized as valid and mean score of validator II was 4,03 categorized as valid. Total of mean score for validator I was 3,94 and validator II was 3,98 categorized as valid. By matching mean score (x) and category, students learning outcomes assessment sheet developed was categorized as valid by needing little revision for explanation

Tabel 1.3 The Result of Practical Assessment for Instructional Material

Perangkat Pembelajaran	Validat or	Nilai	Keterangan
Semester Lesson Plan	1	B	Needed revision
	2	B	Needed revision
Students learning outcomes assessment (LPHBM)	1	B	Needed revision
	2	B	Needed revision

Development

The aim of the development stage is to produce a revised draft of learning materials based on experts input, simulation, and data obtained from trials. The activity of this stage

is experts' assessments (validation), simulation and product tests.

Experts' Assessment

As explained that before being used in learning activities, the instructional materials should be able to have a "valid" status. Ideally, the developers need to do a re-examination to the experts (validators) regarding the accuracy of the content, learning materials, conformity with learning objectives, physical design, etc. to be assessed well by the validator. The purpose of validation activities in this study is to get a valid or very valid status from the experts. If the instructional material is not yet valid, then validation will be continued until instructional material valid.

In this research, validation set was conducted during 2 months by validators. They were competent, understanding about arrangement of instructional material based in inside-outside-circle learning, giving suggestion to complete arranged instructional material. Suggestions will be used to revise draft II of instructional material so that produce draft III of instructional material.

Validators data, namely Validator I, Haryanto English lecturer of State University Makassar and Validator II, Nurhikmah, as Technology education lecturer at State University of Makassar, with the validation result of instructional material consisting of semester lesson plan and students learning outcomes assessment sheet.

Tabel 1.4 The Result of Validation for Semester Lesson Plan

No	Aspek	Nilai Rata-rata Validator I	Nilai Rata-rata Validator II	Rata-rata
1	Format of RPS KKNI	4,87	4,79	4,83
2	Materials to be Presented	5,00	4,88	4,94
3	Learning Activity	4,95	4,90	4,93
4	Language	4,98	4,95	4,97
Rata-rata Total		4,95	4,88	4,92

From the table above, the average rating of the validator I was 4.95 (valid category) and validator II was 4.88 (valid category). The average total assessment of the validators I and Validator II was 4.92 (valid category). By matching the average (x) total with the specified category, being developed RPS was valid category with explanation can be used without revision.

Validation Result Students Learning Outcomes Assessment Sheet (LPHBM)

No	Aspects	Mean Score of Validator I	Mean Score of Validator II	Average
1	Instruction	4,91	4,93	4,92
2	Content eligibility	4,98	4,90	4,94
3	Language	4,90	4,95	4,93
Total Average		4,93	4,93	4,93

From table above, the average rating of the validator I was 4.93 (very valid category) and the average rating of the validator II was 4.93 (very valid category). The average total assessment of validator I and Validator II was 4.93 (very valid category). By matching the average (x) total with the specified category, the students learning achievement assessment

sheet (LPHBM) was developed including very valid category with explanation can be used without revision.

Recapitulation of instructional materials validation result

Based on validators' assessment in validation sheet, there is practical assessment of instructional material. This practical assessment aimed to know whether instructional material developed can be conducted in the field when related to reference and supporting theories such as inside-outside-circle model, teaching and learning, and curriculum KKNI.

The result of developed practical assessment involved semester lesson plan, and students learning outcome assessment sheet based on validator assessment that presented into table

Tabel 1.6 The Result of Instructional Materials for Practical Assessment

Instructional Material	Validator	Mark	Explanation
Semester Lesson Plan (RPS)	1	A	Needed revision
	2	A	Needed revision
Students learning outcome assessment sheet (LPHBM)	1	A	Needed revision
	2	A	Needed revision

Based on table above, it was concluded that instructional material involving semester lesson plan and students learning outcome assessment sheet can be conducted in the field without revision and categorized as practical.

Tabel 1.7 Data of Students' Learning Outcomes

Score	Frequency	Percentage	Category
65-100	40	100 %	Pass
<65	0	0 %	No pass

Based on the table above showed that all students succeed individually in teaching and learning courses, it means that students' learning outcomes reached the classical graduation criteria that had been set, that is 100% of students passed, it means that all students met the criteria that set the teaching and learning course. This described that instructional material based on developed inside outside circle (IOC) consisting of semester lesson plan and students learning outcome assessment sheet can be applied in teaching and learning course generally and in the study program of sociology education at teacher training and education faculty of Megarezky University.

Development of IOC model refers to general model to find out education problem using developing learning model by Thiagarajan and Semmel (1974) called 4-D model. This model consisted 4 steps including defining, designing, developing and disseminating. The syntax of IOC model consists of six steps, namely (i) delivery of learning objectives and motivating students, (ii) delivery of materials, (iii) organizing students into study group, (iv) providing tutoring and group work, (v) evaluation, and (vi) giving reward.

Based on the criteria used, the learning model was called good if learning model fulfilled valid criteria, practical, and effective. Based on data analysis of the validation and the analysis result of trial data, it can be obtained as follows:

1. Validity

From the analysis of the data it can be seen that the average result of experts' judgment (VR) was greater than 3, so it can be concluded that the IOC model was valid.

2. Practicality

From the data analysis it can be seen that (1) the lecturers stated that they can implement IOC model. (2) the level of feasibility of the model was high. From the information (1) and (2) above it shows that the IOC model was practical.

3. Effectiveness

Based on the result of data analysis it was known that (1) mean score of students' activity was high, (2) students learning outcomes were not high, (3) data of students' dominance development had not been obtained, (4) students respond learning well, and (5) lecturers gave positive response to the IOC model. The description of the validity, practicality, and effectiveness of IOC model above showed that the result of the first trial did not meet the effective criteria (second criterion). So, IOC model did not yet meet the practical and effective criteria. Thus, development activities need to be continued by making revision to the prototype parts require

revision. After the second trial done, data analysis showed that students learning outcomes were high. So IOC model had fulfilled the practical and effective criteria. Thus, development activities were considered sufficient and produce the products of practical and effective IOC model.

CONCLUSION

Based on research aims and discussion, it can be concluded that The result of the development shows that IOC model has good quality including valid, practical, and effective product criteria. Based on practicality, lecturers who teaching and learning in universities can use the IOC learning model in class. The use of the IOC model provides a solution on how to direct the existence of dominant and submissive students so that leadership and participation in group work (group discussions) can be pursued more evenly. All students achieve individually teaching and learning courses, it means that students' learning outcomes reaches the classical graduation criteria that has been set, that is 100% of students pass. It means that they met the criteria that set. This shows instructional materials based on IOC model that have been developed consisting of semester lesson plan (RPS) and students learning outcomes

assessment sheets (LPHBM)). Those can be used in teaching and learning courses in general and especially in FKIP Megarezky University.

REFERENCES

- [1] Adebimpe, A. O. (2005). Improvisation of Science Teaching Resource. Science Teachers Association of Nigeria (STAN) 40th Annual Conference Proceeding, 55-60
- [2] Akhiruddin, Sujarwo, Haryanto Atmowardoyo & Nurhikmah. (2019). Teaching and Learning. Gowa.
- [3] Amadi, R. (2002). Harnessing Educational Resources in the teaching of history of sustainable development. Journal of Teacher Education (1) pp 140-141
- [4] Eniayeju, I. E. (2005). Improvisation of Effective Learning of Physics: The Asaba Education Technical and Science Education Journal, 1 (1), 92-93
- [5] Eshiet, I. T. (2001). Using Local Resources in Teaching. Journal of the Royal Society of Chemistry (RSC). London 25, 718-120
- [6] Government Regulation Number 32 of 2013 which is a refinement of Government Regulation Number 19 of 2005 concerning the National Education System
- [7] Hamzah, B Uno, dkk. (2010). Learning with PAILKEM Approach. Jakarta: Bumi Aksara
- [8] Ige, N. P. (2004). Poor Performance in Chemistry in Technical Colleges of Education: Courses and Implications. Unpublished PGDE Project of Ahmadu Bello University, Zaria, Nigeria.
- [9] Igwe, I. O., Arop, B. A. & Ibe, J. O. (2013). Problems of Improvising Instructional Materials for the Teaching and Learning of Chemistry. Journal of Science Teachers Association of Nigeria (STAN), 40 (1&2), 51-56
- [10] Lie. (2008). Cooperative Learning: Practicing of Cooperative

- [11] Sanjaya, Wina. (2008). Learning in the Implementation of Competency Based Curriculum. Jakarta:Kencana.
- [12] Sugiyono. (2012). Educational Research Quantitative, Qualitative Method, and Research & Development (R&D). Bandung:Alfabeta.
- [13] Sujarwo, Sukamawati &Yahrif, Muh. (2019). Learning Models in Scientific and Inovatif Approach. Serang-Banten. CV. AA. RIZKY.
- [14] Thiagarajan, S., Semmel, D.S., & Semmel, M.I. (1974). Instructional development for training teacher of exceptional children. Bloomington Indiana: Indiana University.
- [15] Trianto. (2009). Designing Innovative Learning Models - Progressive. Surabaya:Kecana.