Development of Multiple-Intelligences Based Soft Skills Learning Model

[1]Hasrat A. Aimang, [2]Abd. Kadim Masaong, [3]Ansar, [4]Ihkfan Haris

[1]*Universitas Muhammadiyah Luwuk, Indonesia, hasrat@unismuhluwuk.ac.id*
[234]*Universitas Negeri Gorontalo, Indonesia*

Abstract

The development of students' soft skills has become the responsibility of higher education institutes to produce ready-to-work graduates. The learning process facilitated by lecturers and coaching in extracurricular activities are the key factors of students' soft skills so they need an appropriate learning model. The purpose of this study is to produce a soft skill learning model based on multiple intelligences for students at Universitas Muhammadiyah Luwuk. This research is a development approach where 50 students were involved. Referring to the research and development design which is modified from the Borg & Gall development model, this research carried out the following development procedures, namely; (1) research and information collection; (2) planning; (3) develop a preliminary form of product; (4) preliminary field testing, (5) main product revision, (6) main field testing; (7) operational product revision; (8) dissemination and distribution. This research reveals that the development of a multiple intelligences-based soft skills learning model with an integrated, outbound and discreet approach contribute to the development of student soft skills as well as the soft skills needed in the world of work.

Keywords: Learning Model, Soft Skills, Multiple Intelligences.

INTRODUCTION

Education is an essential part of human development. The process of pursuing education in higher level involves many parts like lecturers and students. The involvement refers to humans' interaction where each individual has their own potential as national asset as well as the basic capitals of national development. The existing potential must be developed and nurtured effectively through targeted and integrated education and learning strategies, which are managed in a harmonious and balanced manner. Therefore, educational strategies need to pay special attention to the development of intellectual potential and special talents that are skills, including soft skills.

The learning process in the Kampus Merdeka is one of the manifestations of student centered learning that is very important. It gives challenges and provides opportunities to the development of innovation, creativity, capacity, personality, and necessity of the students as well as to develop independency in learning and exploring knowledge throughout fields' reality and dynamics such as skills requirement, real problems, social interaction, collaboration, self-management, work demands, target and its achievement. Throughout this program, if it's planned and implemented properly, students' hard and soft skills will be strongly developed, such strategy to improve the mastery of soft skill attribute through teaching and learning activities, both academic and non-academic [1].

Education is also to prepare the future of students. Education must be able to equip graduates with a number of skills needed to be able to develop and adapt in the workplace with commensurate rewards. Wagner (2008) puts forwards seven survival skills that have important values in this 21st century era. If we look closely, these skills are soft skills, namely: (1) critical thinking and problem solving; (2) collaboration through networking and leading with influence; (3) agile and adaptability; (4) initiative and entrepreneurship; (5) effective written and unwritten communication; (6) access and analyze information; and (7) imagination and creativity. Thus, mastery of soft skills is important so that graduates are able to survive in the face of various work challenges.

Based on a preliminary study, student activities at the University of Muhammadiyah Luwuk Banggai have not yet been fully implemented in the approach to improving student Soft Skills, in practice its development can only be seen in activities that are student organizations formed by the University, specifically the Soft Skills development approach has not been fully touched. Furthermore, the university's first vice chancellor for academic affairs said that it will be held on July 9, 2021, that Soft skills need to be taught to achieve the intelligence goals of teaching participants. Soft skills are also an important requirement in supporting success beyond hard skills. Currently, the teaching and learning process is no longer focused in the classroom. This is a demand for the Merdeka Belajar Kampus Merdeka (MBKM) program to focus on students, in particular the University of Muhammadiyah Luwuk Banggai does not yet have a structured soft skills learning model, only using conventional learning models.

The development of soft skills based on multiple intelligences for University of Muhammadiyah Luwuk Banggai students is the essence of competence that must be mastered and measured through performance during learning. The development of multiple intelligence-based soft skills is seen as part of an effort to form a professional attitude. This attitude will affect the behavior of caring for quality, fast, precise, and efficient, respecting

time and reputation [2]. The formation of attitudes must be carried out from the beginning through a work habituation process that is developed and aligned with learning needs. To solve the problems faced, it is necessary to develop a soft-skills learning model based on multiple intelligences for students, so that from these results, the main product produced is a model for developing multiple intelligence based soft skills learning to be used in student development in higher education.

Methods

The subjects of this research are university students by employing research and development approach. Research and Development (R&D) is type of research used to produce certain products and their effectiveness. These products can be learning models, utilizing product, etc. To be able to produce certain products, needs analysis is used and to test the effectiveness of these products so that they can function in the wider community, research is needed to test their effectiveness. In carrying out the research and development of this learning model, it also refers to the research and development design which is modified from the Borg & Gall development model [3], but in this research and development, the researcher did not go through the 8th and 9th procedures, this was due to time constraints for the researcher. The procedures represent and explain several development phases, namely: (1) research and information collecting, which includes review of literature, class room observation, and preparation of report of state the art; (2) planning, includes defining skills, stating objectives determining course sequence, and small scale feasibility testing; (3) develop preliminary form of product, includes preparation of instructional materials, handbooks, and evalution devices; (4) preliminary field testing conducted in from 1 to 3 scholls, using 45 subjects, interview, observational, and questionnaire data cloocted and analyzed. This involves interview, observation, data collection and data analysis; (5) main product revision- Revision of product

as suggested by the preliminary field test results; (6) main field testing, doing field testing to the fixed or revised model; (7) operational product revision), doing revision towards the previous testing results; (8) dissemination and distribution.

Findings

Validity Test

Design validity is intended to: (a) knowing the accuracy of the design in terms of the concept of learning soft skills based on multiple intelligences, functions of soft skills based on multiple intelligence, components of soft skills based on multiple intelligences, learning strategies for soft skills based on multiple intelligences, and stages of learning soft skills based on multiple intelligences, (b) knowing design accuracy in terms of model development, (c) determine design accuracy in terms of design meaning, (d) determine design accuracy in terms of the use of Indonesian, and (e) produce multiple intelligence-based soft skills learning models for students that have been validated by development experts models, learning design experts, and Indonesian language experts.

1.   Experts' Validation on Model Development

In this section, the data from the expert validation of the model development is shown in table 1 below

Table 1: *The Results of Experts' Validation on Model Development*

Indicator	Average Score	Category
The suitability of the multiple intelligence-based soft skills learning model with the model components	5	Fair
The suitability of model images with multiple intelligence-based soft skill content for students	9	Very Good
The ability of the model to explain the stages of learning soft skills based on multiple intelligence	10	Very Good
Use of symbols in model drawings (colors, lines, arrows)	9	Very Good
Model clarity for model users	8	Good
The level of ease of the model to be understood by the user	9	Very Good
Display	6	Fair
Naming	9	Very Good
Total	8,1	Very Good

Table 1 provides an overview of the presentation of expert validation of model development is 8.1 with a "very good" assessment category.

2.   Experts' Validation on Model's Design, Media, and Layout

The data from the validation results of model, media, and layout design experts are shown in table 2 below:

Tabel 2. *The Results of Experts' Validation on Model's Design, Media, and Layout*

Indicator	Percentage	Category
The suitability of the book design with the content delivered	9	Very Good
Clarity of book design in conveying content	9	Very Good
Design image on book cover	10	Very Good
The size of the letters on the book cover	8	Good
Letter model on book cover	9	Very Good
The color used on the cover of the book	9	Very Good
The size of the letters on the writing of the pages of the book	8	Good
The letter model on the writing of the book pages	9	Very Good
Book page design	9	Very Good

Indicator	Percentage	Category
Book physical size	8	Good
Overall book view	8	Good
Total	8,7	Very Good

Table 2 provides an overview of the average value of the validation of model, media and layout design experts, the percentage is 8.7 with a "very good" assessment category.

3.   Indonesian Language Experts' Validation

Completing the model that requires Indonesian language expert validation, this presentation of data from Indonesian language expert validation can be seen in table 3 below:

Table 3. *The Results of Indonesian Language Experts' Validation*

Indicator	Average Score	Category
The use of diction	8	Good
Sentence Forms	9	Very Good
Paragraph coherency	8	Good
Clarity of the sentence used	9	Very Good
The use of letters and punctuation	9	Very Good
Clarity of main idea in paragraph	8	Good
The use of capital letters	9	Very Good
The use of punctuation marks	8	Good
Conformity with Indonesian writing rules	8	Good
Reading Convenience	9	Very Good
Total	8,5	Very Good

Table 3 provides an overview of the average validation value of Indonesian linguists with an average percentage of 8.5 with a "very good" assessment category.

After the revision stages of the validation results and model testing have been carried out, the researcher can create a final model of multiple intelligence-based soft skill learning for students at Universitas Muhammadiyah Luwuk, as described in Figure 1.
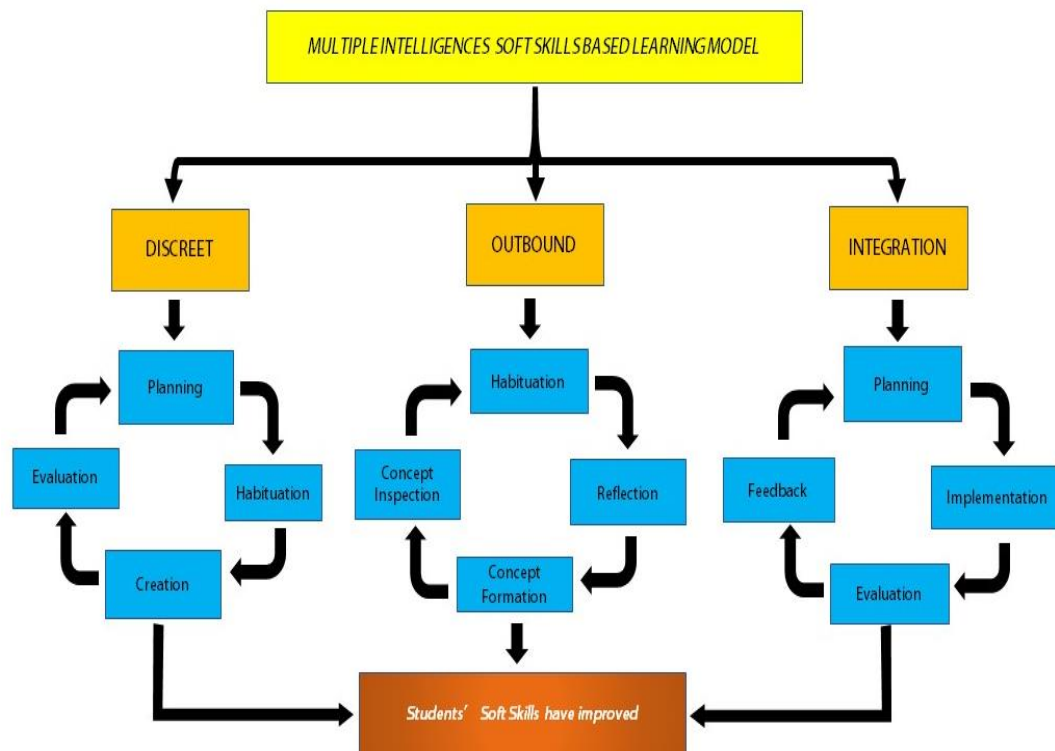

Figure 1: *Multiple Intelligences based Soft Skill Learning Model for Students*

The details of this multiple intelligences based soft skill learning model by following three levels will be explained in turn.

Integration

Planning

Syllabus analysis is carried out by identifying the values of multiple intelligence-based soft skills that can substantially be integrated into competency standards or core competencies and basic competencies to be taught. The identification of character values is not intended to limit the character values that can be developed on competency standards or core competencies of learning and basic competencies but as an effort to identify soft skill values that will be developed in the learning process.

The stages of planning for the integration of multiple intelligence-based character values in subjects are as follows; (1) Analysing competency standard (SK) or Core Competency (KI) and Basic Competency (KD); (2) Identifying multiple intelligences based soft skill values that are substantially can be integrated into the relevant SK or KI and KD. It should be noted that the identification of soft skill values is not intended to limit the values that can be developed in the relevant SK or KI and KD; (3) Developing syllabus to integrate to the multiple intelligences based soft skill values. Syllabus development can be done by revising the existing syllabus and then adding the soft skill competency assessment section; (4) The soft skills section is filled with the value of multiple intelligence-based soft skills that will be integrated in learning. The values entered are not only limited to the values that have been determined through the analysis of SK or KI and KD, but can be added with other values that can be developed through learning activities (not through learning substance); (5) Conducting an analysis of learning activities, achievement indicators, and/or assessment techniques, to be adapted or reformulated to suit the multiple intelligence-based soft skills to be developed; (6) Confirming that the value of multiple intelligence-based soft skills that will

be developed in subjects is in accordance with the basic competencies to be achieved.

Implementation

The implementation of the integration of the value of multiple intelligence-based soft skills in learning is carried out after the lecturer analyses the syllabus and prepares a Lesson Plan (RPP). The compiled design is then implemented in learning activities from the preliminary, core, and closing stages of activities, selected and implemented so that students practice the targeted multiple intelligence-based soft skill values.

Lecturer behaviour during the learning process can be a model for implementing values for students, meaning that lecturers must always be able to become role models for soft skill value behaviour for students. Lecturers also play a role in observing and providing reinforcement in the process of developing student soft skills.

Evaluation

Evaluation of the implementation of the integration of soft skills values into courses does not change the hard skill assessment format, but makes a separate assessment, by preparing a separate assessment format to monitor the development of soft skills that develop, the assessment is carried out open at the end of learning but carried out during the learning process, by conducting monitoring and initial assessment so that during the learning journey students will make personal adjustments among other students, then monitor and final assessment to determine the soft skills that develop.

Feedback

The implementation of feedback is carried out to provide a portion of students to assess and provide comments on the learning process carried out by evaluating the soft skills that developed at the beginning of the learning implementation until the end of the learning implementation.

Outbound

Habituation

At this stage students are involved in an activity or game with other people. Outbound activities are a form of providing direct experience to students. Direct experience in outbound will be used as a vehicle to generate intellectual experience, emotional experience, spiritual and physical experience. With this experience, each student is ready to enter the next stage of activity called the stage of finding meaning.

Reflection

The contemplation activity aims to process the experience gained from the outbound activities carried out. Each outbound student participating in this stage reflects on the personal experience felt during the activity: what is intellectually, emotionally, and physically felt. In this stage, the facilitator tries to stimulate the students to achieve their own personal experiences after being involved in outbound activities.

Conception

At this stage, outbound students seek meaning from intellectual experiences, emotional experiences and physical experiences gained from involvement in outbound activities. What experiences are captured in an outbound game and what the game means for personal life and in relationships with others.

This outbound stage is carried out as a continuation of the reflection stage, by asking the outbound participating students what is the relationship between the activities carried out and the actual behavior that will be carried out on campus, at home, in the community and in the world of work.

Concept Evaluation

The outbound students are invited to reflect and discuss the extent to which the concepts are formed in the stages before they can be applied in everyday life, both in family life, in society, as well as life on campus and the world of work. The facilitator helps outbound students by asking several questions that lead students to see the relevance of the experience during the training with their daily activities.

Discreet

Planning

Discreet implementation or packaged in basic leadership training activities, students must have a directed curriculum in order to achieve the objectives of implementing activities effectively. Planning for discreet tutor activities must be well formulated. The components include the activities of formulating the goals to be achieved in an activity, the methods used to assess the achievement of these goals, the materials to be presented, how to deliver them, the preparation of the tools or media used. This planning allows the lecturer to prepare and determine what actions will be taken during the learning process so that the learning process can take place effectively.

Habituation

At this stage students are involved in an analysis of topics or activities with other people. Discreet activities are a form of providing direct experience to students. Direct experience in discreet will be used as a vehicle to generate intellectual experiences, emotional experiences, spiritual and physical experiences and critical thinking. With this experience, each student is ready to enter the next stage of activity called the stage of finding meaning.

Creation

What means by creation here is when the discreet students seek meaning from intellectual experiences, emotional experiences and physical experiences gained from engaging in discreet activities. What experiences are captured in a discreet activity and what is the meaning of the game for personal life as well as in relationships with other people and the relationship with soft skills along with the relationship between the activities carried out and the actual behavior that will be carried out on campus, at home and in the community and the world of work.

Evaluation

At this stage the evaluation is to monitor the development of soft skills that develop, the assessment is also carried out during ongoing activities related to student development, in the sense that the assessor is not carried out at the end of the discreet activity but is carried out during the learning process, by monitoring and initial assessment so that In the course of the learning process, students will make Personal Adjustments among other students, then

monitor and final assessment to determine the soft skills that develop.

4.   Individual Test Data

Based on the analysis of individual test data, conclusions are obtained from the perceptions of lecturers/tutors on the understanding and implementation of the multiple intelligence-based soft skills learning model for students. The following are the results of individual trials shown in table 4.

Table 4. *Recapitulation of Individual Trial Results on Multiple Intelligence-Based Soft Skill Learning Model*

No	Stages	Questions (%)				
		5	4	3	2	1
1	Planning	63.27 %	34.69 %	2.04 %	0 %	0 %
2	Implementation	66.67 %	28.57 %	4.76 %	0 %	0 %
3	Evaluation	64.29 %	35.71 %	0 %	0 %	0 %

Notes: (5: Very Suitable), (4: Suitable), (3: Fairly Suitable), (2: Less suitable) and (1: Not Suitable)

From the results of trials on the multiple intelligence-based soft skill learning model for University of Muhammadiyah Luwuk students, from 3 stages as follows: (1) planning with a very suitable category is 63.27%, according to 34.69%, quite appropriate there are 2, 04% while for the unsuitable and unsuitable category the respondents did not have, (2) the implementation with the very appropriate category was 66.67%, the appropriate was 28.57%, quite appropriate there were 4.76%, while for the less suitable and inappropriate category the respondents did not choose, (3) evaluation with a very suitable category was 64.29%, according to 35.71% while for the category quite suitable, less suitable, and not suitable or the respondents had not responded.

Discussion

Higher education as a vehicle for organizing and implementing a multiple intelligence-based soft skill learning model using a staged approach, this will have an impact on providing an active, interesting, fun learning atmosphere, full of familiarity with each other, helping each other, and conducive, as befits ideal learning.

intact and harmonious, so that a positive interaction process takes place between students and students, students and lecturers/tutors/facilitators, all students will be involved and active students in learning situations both in providing questions, responses, suggestions or opinions, complementing each other between student friends so that the potential possessed will be the development of student soft skills [4] suggests that the process of teaching and learning activities carried out is prioritized by active students so that they can provide good lectures. Similar was conveyed by [5]. The activeness of students in the learning interaction process is generally caused by interesting learning.

The implementation of learning in the context of developing soft skills for students at Muhammadiyah Luwuk University appears to have developed soft skills including leadership, analyzing, solving problems quickly, critical thinking, teamwork, commitment, optimism, high initiative, honesty, confidence, patience, working sincerely, mutual support. value. Students get learning conditions in a situation full of joy, relax and work together in groups,

do not feel awkward, full of enthusiasm, high motivation, have integrity and strong self-confidence to participate in all ongoing activities. With this multiple intelligence-based soft skill learning model, it will spur the growth of educative learning interactions that can forge in all directions both the achievement of hard skills, especially the achievement of students' soft skills. Lecturers/tutors create an atmosphere of student-focused learning interaction (learning centered) while students continue to actively participate in activities to fulfill the desired soft skill achievements. Meanwhile, lecturers/tutors have more roles as facilitators, mentors, and student directors.

Presentation of the subject matter in the learning that is discussed / studied is expected to involve students in the development of soft skills in the sense that the material is attempted to relate to the fulfillment of student needs, because meeting these needs is very important as a consideration in human life. As the opinion of [6] about the hierarchy of human needs that can be used to build one's motivation. Furthermore, according to [7] it is necessary to develop media, models and student learning strategies that pay attention to the student's learning needs so that the development carried out provides benefits for increasing student learning experience.

The formation of student soft skills is certainly strongly influenced by a model that is run by lecturers/tutors to awaken the abilities possessed by students, in this case what is done in this model with the approach of lecture, outbound, and discreet activities, of course in the process it is expected to develop student soft skills. Before carrying out activities, it is necessary to determine what soft skills you want to develop. This step is in line with the importance of determining the initial characteristics (baseline) of soft skills needs to be done to identify what soft skills attributes are needed by students [8].

The role of lecturers/tutors is very much needed in this case to monitor, facilitate, guide and direct so that all learning components run well in accordance with the established system. All of these components become the basis or foundation in the development of a multiple intelligence-based soft skill learning model.

Conclusion

Based on the results of model development involving experts and several trials, the developed model is able to support the increased soft skills results, model development through three approach activities, either through integration, outbound, or discreet which is carried out in stages. In a short word, the multiple intelligence-based soft skills learning model can improve students' soft skills.

Aknowledgements

Reference

[1] A. S., I. H. Ansar. Assessing Soft Skills of Undergraduate Students: Framework for Improving Competitiveness, Innovation and Competence of Higher Education Graduates. Studia Humanitatis, 1. 2018.

[2] Djoyonegoro, W. Pengembangan Sumber Daya Manusia melalui SMK. Jayakarta Agung Offest. 1998.

[3] Sugiono. Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. Alfabeta. 2013.

[4] Irsyad, T., Wuryandini, E., Yunus, M., & Hadi, D. P. . Analisis Keaktifan Mahasiswa dalam Proses Pembelajaran Statistika Mulitvariat. Jurnal Pendidikan Ekonomi Undiksha, 12(1), 2020; 89. https://doi.org/10.23887/jjpe.v12i1.24294

[5] Kariadi, D., & Suprapto, W. Model Pembelajaran Active Learning Dengan Strategi Pengajuan Pertanyaan untuk Meningkatkan Kualitas Proses Pembelajaran PKn. Educatio, 13(1), 2018; 11. https://doi.org/10.29408/edc.v12i1.838

[6]   Abraham H. Maslow. Motivation and Personality. Harper & Row Publisher. 1970.

[7]   Feniareny DA. Analisis Kebutuhan Belajar Mahasiswa Pada Mata Kuliah Pembelajaran Matematika Kelas Rendah. Jurnal Ilmiah Pendidikan Guru Sekolah Dasar, 2(1). 2018.

[8]   Taofan Ali Achmadi, A. B. A. I. I. L. S. R. D. A. Analisis 10 Tingkat Soft Skills Yang Dibutuhkan Mahasiswa di Abad 21. TEKNOBUGA: Jurnal Teknologi Busana Dan Boga, 8(2). 2020.