HEUTAGOGY IN RESEARCH-BASED LEARNING AT SANGGAR ANAK ALAM (SALAM) YOGYAKARTA

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Abstract

This study described the design of the heutagogy approach applied at Sanggar Anak Alam (SALAM) Yogyakarta. Heutagogy is the study of self-determined learning. Heutagogy provides opportunities for students to choose what to learn and how to learn it freely. SALAM is one of the alternative schools that has applied the concept of a heutagogy approach for a long time. The learning model used by the SALAM learners is research-based learning. This research design is qualitative with a descriptive type of research where data collecting from interviews, observations, field notes, and personal documentation described in the form of descriptive narratives. The research findings show that SALAM applies the design concept of a heutagogy approach in the research-based learning process which includes self-determination of learning contracts, flexible curriculum formation, self-directed questions, flexible and negotiable assessments, reflective exercises, and collaborative learning. Through a heutagogy approach with research-based learning, SALAM students can face the challenges of the 21st century needs.

Keywords: Heutagogy, Research-based learning, Alternative education, Sanggar Anak Alam (SALAM)

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1. Introduction

The 21st-century education is required to prepare students to learn and innovation skills, use and utilize information technology and media, also work and survive using life skills. Learning in the 4.0 education era is carried out by utilizing digital technology, open-source content, and global classrooms in the application of lifelong learning, a flexible education system (Huang et al., 2020; Joan, 2013) and personalized learning (DiMartino et al., 2001; Patrick et al., 2013).

The learning approach developed to face the challenges of education 4.0 is heutagogy. Heutagogy studies self-determined learning (Haze & Kenyon, 2000). Heutagogy is a learning approach that does not focus on learning content but learns how to learn and acquire learning content (Stewart Hase, 2016; Narayan & Herrington, 2014). Hase & Kenyon (2013) stated that heutagogy allows students to choose what to learn and how to learn it freely. This heutagogy approach is closely related to constructivist and humanist theory (Blaschke & Hase, 2016; S. Hase, 2014; Stewart Hase, 2016; Stewart Hase & Kenyon, 2013).

Heutagogy requires students to act as the principal-agent in their learning. In this case, the learner decides what he will learn, when, and how the learning structure will be. Heutagogy makes students to have an interest in learning and must reflect on themselves, regarding whether they need to learn specific topics and need to reflect on themselves from those topics or whether they still need to learn from subtopics whose values are still poorly understood. The most important thing about heutagogy is self-reflection after evaluation. In addition, if the curriculum or material is lacking, it can rearrange the curriculum and learning needs (Dewantara, 2021).

One of the learning models that can be applied in the heutagogy approach is project-based learning. Project-based learning challenges students to hone their investigation skills and find more learning resources (Farris, 2015). There are six steps in project-based learning based on (Foundation, 2005); (1) determine the essential questions; (2) design the project design; (3) arrange a schedule; (4) monitor project progress; (5) test the process & learning outcomes; (6) evaluate the experience.

Sanggar Anak Alam (SALAM) is one of the alternative schools that has implemented a heutagogy approach with research-based learning for a long time. SALAM is a form of educational institution that started its activities in 2000 in Nitiprayan Village, Kasihan, Bantul, Yogyakarta. SALAM has an institutional operating permit as a Community Learning Center (PKBM), but they facilitate students like in a formal school. There are several levels of education, ranging from Playgroup, Kindergarten, Elementary School, Junior High School, and Senior High School. The pursuit of Elementary School is taken for six years like elementary school in a formal school. Meanwhile, Junior High School and Senior High School is carried out for three years.

Rahardjo (2018) describes four main characteristics that distinguish alternative schools from mainstream schools: first, the philosophical aspect that underlies alternative schools in carrying out their education is philosophically humanistic. It is because alternative education seeks to build a complete human being in the educational process. Second, child-oriented. It indicates that alternative education values students as growing individuals, so they are treated according to their physical and psychological development—third, a holistic approach to the learning process. With a holistic approach, subjects are not delivered separately by conventional schools but are presented thematically over a certain period. Fourth, there is a democratic relationship between teachers, students, and parents. So that together they create a good education in one community. From this description, it can be said that alternative education focuses on student's individual development and is carried out democratically between students, parents and facilitators.

SALAM conducts learning planning using the constructivist paradigm, where learning planning is carried out through interest and talent analysis activities. Furthermore, the implementation of learning and evaluation of learning uses a critical pedagogical paradigm; besides that, the learning methods used are research and discussion methods.

SALAM is a school that seeks to form critical education, drive the economy and be able to live in the surrounding environment. According to Rahardjo (2018), SALAM is a school without uniforms, schools without teachers, schools without subjects, and a research-based curriculum, bringing schools closer to real life and liberating their students. The implementation of education in SALAM involves all elements, such as students, facilitators, parents, managers, and the community, as inputs so that it is expected that the output formed in SALAM is a learning community.

SALAM develops its curriculum according to the child's needs and adjusts to the child's age, only taking indicators from the national curriculum, but SALAM educators themselves develop the rest. SALAM has a program of activities inside and outside the classroom, healthy food, health, environment, arts, and culture with a curriculum that focuses on exploring children's surroundings, which is fun, respects differences, and loyalty.

The learning method generally uses research methods whose themes are determined by students, starting from planning to presentations in front of other students. The research carried out differs from one student to another according to their respective interests. The learning model used to achieve the goals and context is called the learning cycle. SALAM provides more free time for students to learn so that they are happy and free to develop their respective interests, potentials, and interests in learning.

Research-based learning applied at SALAM aims to facilitate the learning needs of each student where they have different learning needs. Through research learning, students are given the freedom to learn according to their wishes. Students are directed to think structured through research, experience the cause and effect of an event, and find their knowledge by utilizing existing resources in the surrounding environment.

Through this learning, SALAM has applied heutagogy as its learning approach. Based on Stewart Hase & Kenyon (2007), the application of heutagogy approach-based learning must pay attention to several conditions in the design process, including; (1) learning contract, where students determine their learning path, what is learned, how to learn, how to assess it. Students make learning contracts based on what they decide; (2) curriculum flexibility, what is meant by a flexible curriculum is a curriculum that provides opportunities to be negotiated, which adapts and develops according to learning needs. Based on Stewart Hase & Kenyon (2013), in a heutagogy learning environment, students are the drivers who create curriculum flexibility; (3) questions for

students, where questions are asked to be discussed to provide direction to help students understand learning. These questions are in the form of guiding reflection questions for students; (4) a negotiated and flexible assessment, apart from learning materials and processes, the assessment is also an important point. The assessments used in learning are flexible and negotiable; (5) reflection is an essential element of heutagogy. Reflection will direct the transformation of learning.

This article describes implementing the heutagogy approach design in research-based learning at Sanggar Anak Alam (SALAM). This research is expected to contribute to developing the science and practice of the heutagogy approach in learning, especially in the non-formal education path.

2. Method

This study uses a qualitative approach with a descriptive type of research. Data was collecting from interviews, observations, field notes, and personal documentation described in the form of descriptive narratives. The research subjects were selected based on the snowball sampling technique, including the founder, chairperson of SALAM, facilitators, students, and parents of SALAM students. The research was carried out at the Sanggar Anak Alam (SALAM), located in the village of Nitiprayan, Jomegatan, Ngestiharjo Village, Kasihan District, Bantul Regency, Special Region of Yogyakarta.

Data analysis was carried out based on Miles and Huberman, through: 1) data reduction, namely by explaining, choosing necessary things, and focusing on things that were important to the content of data from the field; 2) data presentation, namely displaying data simply in the form of words, sentences, and narratives; 3) and concluding/verification.

The study uses two credibility standards, member checks, and triangulation. Member check is carried out at the end of each interview activity. The researcher tries to repeat the outline of the interview results based on the notes made so that the information obtained can be used in writing reports following what is meant by the data source. Triangulation in this study uses data examination through sources, data collection techniques, and data collection time.

3. Results and discussion

SALAM implements a curriculum called the teaching and learning process or learning cycle. The learning cycle is more directed at each student's interests in SALAM. The learning cycle consists of the stages of doing, expressing, analyzing, drawing conclusions, and applying. From these stages, SALAM emphasizes 4 (four) perspectives: food, health, environment and socio-culture. The learning cycle uses research methods whose themes are determined by students starting from planning to the presentation of results by each student.

As an alternative school, SALAM has its term regarding educators. Educators at SALAM are called facilitators. The mention of the term facilitator in SALAM is because the task of educators is not to teach (teachers) but to facilitate students to learn. Based on Romo Mangun Wijaya, students are masters of themselves, so the role of educators is to provide space for them to carry out their learning process.

The learning model in SALAM follows the principles of the Heutagogy approach. Based on Stewart Hase & Kenyon (2013), the principles of the heutagogy approach include: (a) students can learn what they choose to learn, not just what is determined by the curriculum; (b) learners experience their empowerment to take direct responsibility for their learning as active learners; (c) learners understand more about the learning process and become more proficient in learning for themselves; (d) students are more confident in carrying out the learning process for themselves and seek learning resources and experiences that contribute to and enhance their learning; (e) the facilitator also learns. Below will be discussed the design of the heutagogy process that occurs in learning at SALAM based on the following: (1) self-determination of learning contracts; (2) flexible curriculum; (3) self-directed questions; (4) flexible and negotiable assessment; (5) reflective exercise; (6) collaborative learning.

Self-determination of learning contracts

Research-based learning requires students to decide about a framework (SchoolNet, 2000). Learners are fully responsible for their learning activities so that the focus of learning is based on inquiry, and the learning

process is viewed as long-term. The facilitators, students, and parents of SALAM hold a meeting at the beginning of the semester to discuss the research plan that each child will carry out. The research carried out is based on the interests and desires of the students themselves. Learner community of SALAM start the new semester by discussing and choosing research themes, compiling indicators, and determining their research schedule. Research design takes one to two weeks and will be used as a guide for each child in carrying out their independent research for one semester.

The steps of the research-based learning process in SALAM have six stages, including the planning stage, namely the selection of research themes, observation of research objects, planning for one week's lesson by the facilitator, and making research schedules by students. The second stages are implementation and mentoring by facilitators and parents accompanying students to clarify the chosen research object, re-observation, developing questions as research capital, searching for references related to research objects, interviewing permission, conducting data collecting with resources, joint review to share experience between students. The third is the data processing stage, where the facilitator links student data with indicators that must be achieved, and student mission solving is related to research data. Fourth is the practice stage, where students conduct research according to the themes and guidelines from the previous planning results. Fifth is the evaluation and reports writing stage, where students, together with the facilitator and parents, evaluate the research process and results. The students write their research reports. Sixth, the presentation stage, namely the research learning process in one semester, is presented by students in front of the facilitator, parents, other friends, and the committee. Presentations are not only made by students, but the facilitator also makes presentations as reports to parents on the achievement of indicators and the relationship of research with indicators. In this case, the role of educators in heutagogy is to foster efforts to unite opportunity, context, relevance, and complexity to encourage collaboration and curiosity (Hotimah, 2020).

Flexible curriculum

Learners make learning maps, and educators function as a compass in the heutagogy approach. Students determine their curriculum and the material to be studied. After that, students will adapt to the curriculum they have made (Baharman, et al., 2022; Stewart Hase, 2009).

Research in research-based learning is the core of the curriculum, not a compliment to the curriculum. Projects become learning strategies; students experience and learn the core concepts of a discipline through projects (Pearlman & Thomas, 2000).

The curriculum applied in SALAM is based on each student's interests. Students and facilitators meet to determine the curriculum based on the needs of each child each semester. Learning at SALAM uses research methods for elementary, middle, and high school levels. This method is guided by the learning cycle, a series of processes to plan, implement and evaluate research. The learning cycle is chosen because the sequence of processes allows students to achieve awareness and understanding of the reality being studied.

The first step in the learning cycle is planning. The facilitator and students plan the research they will do, including making a list of questions and preparing learning resources and equipment needed. The second step is conducting the process where students carry out the research they have planned. Students conduct research by looking at natural environmental conditions as the starting point for the following process. The third step is disclosing data, the process in which students express by restating what they have experienced, both in the form of their responses and impressions of the experiences experienced by students.

Furthermore, the fourth step is analyzing, the process where students analyze the research results, they have done. The fifth step is reflection, the process where students learn to formulate the meaning and reality they have encountered as a full new understanding or understanding. At this final stage, students are expected to be able to create new realities from the results of their analysis and reflection.

Self-directed questions

Learners' design processes aim to determine solutions to proposed problems or challenges (SchoolNet, 2000). Before conducting research, students compile a list of questions related to the research details to be carried out. These questions come from brainstorming between students and facilitators. The questions that arise will become material for making research designs for each student.

One of the biggest obstacles in applying the heutagogy approach is to ensure that students know the questions they will ask are relevant to the learning content (Suhaimi & Tajudin, 2020). In this case, the class facilitator is tasked with asking and directing students to come up with questions and ideas under the research context and learning materials.

Flexible and negotiable assessment

Self-determined assessments by students are proven to increase motivation and reduce feelings of threat from the assessment (Stewart Hase & Kenyon, 2007). According to Hase (2009), learning contracts determined by students can be used as a method to integrate consultation and negotiation during the ongoing assessment process.

Each student presents the achievements of the indicators of learning success. Some children presented their results by practicing directly the research themes they chose. Some show their work for one semester through exhibitions and PowerPoint presentations. Self-monitoring is essential to check whether students as learners have carried out the learning process that has been determined and agreed upon from the start so that the learning process can be carried out better (Fauzi, 2021).

A learning process at SALAM is highly valued and appreciated, not the result being the only assessment. The evaluation process is carried out continuously, and the final product of the activity will be evaluated qualitatively. Learning situations tolerate mistakes and changes (SchoolNet, 2000).

Reflective exercise

Students present indicators of learning success each semester in the final presentation. They closed it with a conclusion containing their assessment of learning achievements. Other students also provide reflections on the learning outcomes of each student. In heutagogy, peers provide feedback on student learning outcomes (Musliah et al., 2022; Porto et al., 2011; Zelani et al., 2021). At the end of the presentation, the class facilitator discusses with parents and students. Parents tell about their children's difficulties in conducting research and then reflect on them together.

Research conducted by SALAM students is not always successful; sometimes, there are failures. However, SALAM builds a learning ecosystem that makes research failures normal and natural and makes these failures a new forum for learning together. Research failures are often awaited by the people studying at SALAM because from these failures emerge new discussions and engaging additional lessons from these failures.

Collaborative learning

The learning atmosphere needs to be packaged to facilitate students to work together with other colleagues. In working on projects, students need to be equipped with an understanding of how to appreciate each person's strengths and be able to adapt quickly (Dewantara, 2021). Communicating with other communities is the essential component of heutagogy. By being interconnected, students' intrinsic motivation will increase because of the same learning environment as the community (Rashid et al., 2021; Zelani et al., 2021).

Research conducted by SALAM students requires learning resources from resource persons related to their project. In addition to digging information from sources, they can also collaborate with various parties to conduct the research. Through the research, discussions, and interactions were built between students, resource persons, and facilitators who facilitated their respective research.

Learners are collaboratively responsible for accessing and managing information to solve problems (SchoolNet, 2000). The affordability of technology in the form of digital media can be in the form of the ability

to explore and find information; create and share new knowledge; cooperate with others in creating new information; connect and network with others on the internet; and reflect the knowledge that has been obtained and construct it on the value system and knowledge of a learner (Blaschke & Hase, 2019).

4. Conclusion

Sanggar Anak Alam (SALAM), as an alternative educational institution, has implemented a heutagogy approach through a research-based learning process conducted by its students. The heutagogy learning designs applied in SALAM include; self-determination of learning contracts, flexible curriculum formation, self-directed questions, flexible and negotiable assessments, reflective practice, and collaborative learning. Through research-based learning, SALAM students can answer the challenges of the 21st century needs. The heutagogy approach has long been implemented in SALAM without realizing it. It opens opportunities for other formal and non-formal educational institutions to adopt the approach.

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