Integration of Heutagogy Within the Curriculum of Community Education Study Program Based on Outcome-Based Education Principles

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Abstract. This study aims to embed heutagogical principles into the Community Education curriculum, serving as a framework for mapping essential competencies within the program. Heutagogy, blending adult learning concepts with student autonomy, repositions educators as facilitators, guiding students to define personal learning goals, manage their learning strategies, and navigate resources. Emphasising lifelong learning and metacognitive development, this learner-centred model promotes ownership and accountability in educational outcomes. The primary goal is to update the curriculum to better reflect workforce needs using the 4D developmental model: Define, Design, Develop, and Disseminate. The approach is quantitative, beginning with a literature review and culminating in curriculum formulation. Expected outputs include a registered research report, conference publication, and a nationally accredited journal article. The projected Technological Readiness Level (TRL) is 3, indicating the research is at the conceptual framework stage and intended to guide competency-driven curriculum development in community education.

Keywords: Heutagogy, Curriculum, Outcome Based Education.

1 Introduction

A curriculum refers to a structured set of plans and frameworks encompassing learning objectives, content, materials, and teaching methods aimed at guiding educational activities toward achieving specific academic goals [1]. In Indonesia, the government sets the foundation and structure of the national curriculum, tailored to each level of education. These adjustments consider key factors such as strengthening faith and spirituality, instilling Pancasila values, nurturing students' potential, intelligence, and interests, embracing cultural and regional diversity, and responding to technological advancements.

At the Penmas (Community Education) Department, the curriculum is designed around Outcome-Based Education (OBE), which focuses not merely on content delivery but on the achievement of specific learning outcomes. As noted by [2], OBE is oriented towards measurable learning outcomes, equipping students with skills that prepare them to compete at the international level. The goal is for students to achieve defined capabilities by the end of their study. To that end, learning activities are structured to build understanding and ensure that outcomes are achieved.

The OBE framework informs the entire curriculum development process—from defining graduate profiles and outlining program learning outcomes (PLOs), to selecting course content and structuring units. These are followed by the development of course-level outcomes

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and learning materials, the delivery of instruction, assessment strategies, and continuous monitoring and evaluation. Graduate profiles describe the roles, attributes, and competencies—both personal and professional—that students are expected to develop during their studies, preparing them for advanced learning or entry into the workforce. Meanwhile, PLOs describe the broader professional or career milestones that graduates are expected to attain a few years post-graduation. Learning outcomes further detail what graduates will know, value, and be capable of doing by the end of their studies, encompassing attitudes, values, knowledge, and skills [3].

OBE is an educational approach that prioritises what students are able to do effectively at the conclusion of the learning experience. Importantly, it also encourages teachers to continuously improve their instructional methods and student outcomes [4]. Achieving a globally competitive graduate profile in the Penmas Department necessitates a shift from Input-Based Education (IBE) to OBE. This paradigm transition moves the focus from "what teachers deem important to teach" to "what students need to learn and master" [5]. The intention is to develop graduates who are not only academically competent but also capable of adapting, innovating, and contributing productively to knowledge and society.

Heutagogy, or self-determined learning, is a framework where educators act as facilitators rather than traditional instructors. It promotes a learner-centred model in which students take full responsibility for shaping and driving their own learning processes [6]. This approach supports student autonomy in selecting learning strategies and creating or adapting their own learning resources [7]. Heutagogy adopts a holistic, proactive learning model where students are regarded as primary agents in their own education, drawing meaning from personal experience [8].

Integrating heutagogy into OBE-based curriculum design offers several benefits:

1. Learning outcomes are more closely aligned with professional and stakeholder expectations, ensuring relevance and applicability in the workplace;
2. The accountability of education providers is enhanced, as outcome-oriented systems are typically more transparent and reliable;
3. The curriculum is more adaptable to contemporary shifts in industry and education, such as Industry 4.0 and policies like SNDIKTI, KKNI, and MBKM;
4. It provides a strong foundation for program accreditation and certification [5].

Based on this context, the current study aims to revitalise the OBE curriculum by embedding heutagogical principles to support more effective and meaningful learning experiences within the Penmas Department. The research seeks to address two key questions:

1. What heutagogical principles are most relevant for integration into the OBE framework of the Penmas curriculum?
2. How can the Penmas curriculum be designed to incorporate these principles effectively?

This study aims to: (1) identify the core principles of heutagogical learning relevant for integration into the curriculum of the Penmas (Community Education) Department, and (2) design a curriculum based on Outcome-Based Education (OBE) that incorporates these principles. The expected deliverables include: (1) a final research report registered for copyright protection; (2) a publication in indexed conference proceedings; and (3) an article published in a nationally accredited journal. The outcomes of this research are intended to: (1) serve as a model and reference for developing OBE-based curricula in Penmas; (2) provide a clear mapping of heutagogical principles suitable for community education contexts; and (3) be used as a guide in formulating Course Learning Outcomes (CLOs) for each unit within the Penmas program.

Outcome-Based Education (OBE), developed by William G. Spady in the 1990s, shifts the focus of formal education from what educators teach to what students are able to demonstrate by the end of their learning journey [9]. Rooted in Piaget's philosophy that education should produce individuals capable of creativity and innovation, OBE requires student competencies to be both demonstrable and measurable—commonly referred to as "learning outcomes" [10]. OBE is a performance-driven and future-oriented educational model [11].

In contrast to traditional content-based models, OBE centres on outcomes. It enables students to acquire relevant skills for global competitiveness by fostering measurable learning results [12][11]. OBE also promotes continuous, innovative, and interactive learning. It influences all aspects of education—from curriculum design and learning objectives to teaching strategies, assessments, and the broader learning ecosystem. Assessment in OBE is criterion-referenced—students are assessed against defined outcomes rather than against their peers. When a student has not met a specific learning outcome, support mechanisms are put in place to help them succeed.

For example, the achievement of CLOs is assessed through weighted evaluations—such as 10%, 30%, 20%, and 40%—that together sum to 100%. These assessments are linked directly to the competencies outlined by the program, which are informed by stakeholder input [12].

Curriculum development in the Penmas Department begins with clearly defined program objectives, which reflect the intended attributes of graduates. These are derived from the institution's vision and mission as well as the expectations of internal and external stakeholders. From there, the curriculum is structured around Graduate Learning Outcomes (GLOs), which serve as the foundation for designing units and assessment tools.

According to Samadhi [5], OBE curriculum design is guided by four key pillars:

a. Clarity of focus: Graduate profiles and learning outcomes are developed collaboratively with stakeholders, focusing on equipping students with the attitudes and skills necessary for lifelong learning.
b. Designing down: Curriculum development follows a top-down process with a structured hierarchy of outcomes, supported by appropriate assessment instruments.
c. High expectations: The curriculum sets ambitious goals to challenge students and avoid a simplistic checklist approach.
d. Expanded opportunities: Students are given broad and flexible opportunities to achieve outcomes.

OBE also entails aligning curriculum structures, learning activities, and assessment practices with clearly defined educational outcomes [10]. Implementation requires lecturers to align teaching strategies and assessment tools with both course and graduate learning outcomes. Supporting documents, such as syllabi and Semester Learning Plans (RPS), must reflect this alignment [13].

In tandem with OBE, heutagogy, or self-determined learning, enhances learner autonomy, maturity, and personal growth. It extends the concepts of pedagogy and andragogy by shifting control of the learning process entirely to the learner. Blaschke [14] outlines the distinction: andragogy involves self-directed, goal-oriented learning within a linear framework, while heutagogy is more adaptive and reflective, focusing on how students learn rather than what they learn.

Richardson et al. [15] further distinguish:

- Pedagogy: Educator-led learning. The teacher designs and delivers content, and students rely heavily on guidance. Learning is sequential and curriculum-focused, with external motivation (e.g., from parents or teachers).

- Andragogy: Self-directed learning. Students assume greater responsibility, guided by learning goals. Motivation is intrinsic, with the teacher acting as a facilitator.
- Heutagogy: Self-determined learning. Students actively seek out challenges and drive their own inquiry. Learning is nonlinear, process-oriented, and focused on developing adaptability. Educators act as curators of meaningful experiences that merge relevance, context, complexity, and collaboration.

In the Society 5.0 era, heutagogy is particularly important as it develops metacognitive skills—the ability to "learn how to learn." Practical heutagogical approaches include:

a. Interdependent learning: Engaging with new knowledge through exploration, hypothesis testing, validation, and collaboration with peers and educators.
b. Double and triple-loop learning: Analysing how knowledge is acquired, its influence on belief systems, and learning from experience to apply knowledge in both familiar and novel contexts.
c. Participatory practice: Students engage in both online and face-to-face learning communities, sharing knowledge, solving problems collaboratively, and responding to peers—thus embedding learning in authentic, socially connected contexts [16].

In summary, integrating heutagogical principles into the Penmas Department's OBE curriculum supports a more flexible, student-centred, and future-ready educational experience. It not only aligns with national policy directions and global shifts in education but also empowers students to thrive in an increasingly complex world.

2 Research Method

This study adopts the Thiagarajan 4D development model, which consists of four stages: Define, Design, Develop, and Disseminate. As stated by Sugiyono [17], the research and development (R&D) method is used to both create products and assess their effectiveness. This research is focused on product development, with a detailed description of each stage of the development process, culminating in the evaluation of the final product. The study uses a quantitative approach, beginning with an initial investigation and continuing through the design and formulation of a curriculum.

The research will be carried out in the Department of Community Education (Penmas), Faculty of Education, Universitas Negeri Medan (Unimed). The study's population includes 25 Penmas stakeholders from the North Sumatra region. Given the small number, the entire population will be used as the research sample.

To inform the curriculum development, data will be collected through a literature review focusing on Outcome-Based Education (OBE) and heutagogy, both of which will be integrated into the Penmas curriculum. According to Creswell [18], a literature review summarises journal articles, books, and other relevant documents to outline both historical and current insights, group the literature by topic, and highlight the research gap that justifies the current study. The collected literature will then be analysed and aligned with the expected learning outcomes of the Penmas program.

This research aims to integrate OBE and heutagogical principles into the curriculum design to support the development of competitive graduate profiles. The process consists of the following stages:

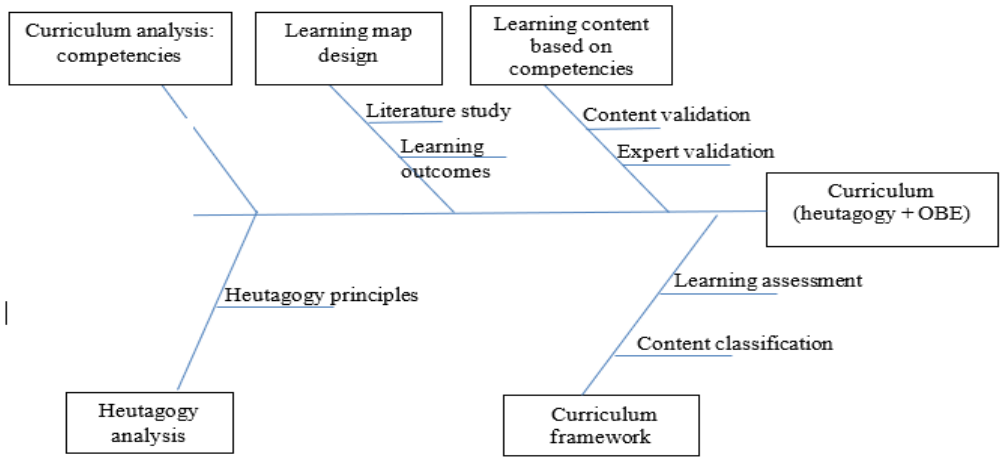
a. Stage One – Learning Needs Analysis through Curriculum Review. This involves:

1. Analysing competency standards
2. Reviewing the core competencies to be achieved
3. Identifying and formulating learning outcome indicators
4. Selecting key content areas
5. Determining learning experiences that students are expected to achieve

b. Stage Two – Developing a Heutagogy-Based Content Map. Following the heutagogical analysis, a teaching material map is created. This mapping determines the content to be embedded in the curriculum, based on the prior analysis of learning needs.

c. Stage Three – Designing an Ideal Curriculum Framework. This curriculum framework is structured around the department's profile, and is aligned with its vision and mission. It also takes into account workforce demands and the future development of human resources in community education.

The complete research process is visually presented using a fishbone diagram, illustrating the logical structure and flow of the study.



3 Results and Discussion

3.1 Heutagogy Learning Principles

Heutagogy, also known as self-determined learning, is a student-centred educational approach that focuses on building learner autonomy, capacity, and capability. Its primary aim is to foster lifelong learning and prepare individuals to navigate the complexities of today's and future workplaces. Heutagogy is a hallmark of Education 3.0, which emerged alongside the rise of the internet and marks a significant shift from earlier educational paradigms (Education 1.0 and 2.0). In this era, technology platforms have transformed learning environments, and educators have evolved from being direct instructors to becoming facilitators. With access to online tools, learners can independently choose what they want to study and set their own goals, while still receiving guidance from educators.

Heutagogy, a relatively new educational framework, derives from the Greek word for "self", and was first defined by Hase and Kenyon [8] as the study of self-determined learning (Blaschke, 2012). In this approach, learners take control of their own education by choosing

learning strategies, setting goals, and developing learning materials in a proactive and engaging way. Educators, meanwhile, serve primarily as facilitators or guides.

The heutagogical model applies a holistic perspective to learning, treating it as an active and personal process where learners are the main agents of their own educational journey (Hase & Kenyon, 2007). This method supports the development of learners' independence, maturity, and self-awareness. According to Blaschke [14], two core elements of heutagogy are double-loop learning and self-reflection. In contrast to single-loop learning, where learners solve problems without questioning the underlying assumptions, double-loop learning requires learners to reflect deeply on their values, beliefs, and the learning process itself [19].

Double-loop learning encourages learners not just to solve problems, but to consider how their actions, beliefs, and learning processes evolve. This leads to more effective problem-solving and knowledge application. According to Narayan and Herrington [20] the heutagogical model includes:

- A flexible curriculum that adapts to the learning process
- Learners driving their own learning paths, activities, and journeys
- Learner involvement in assessment design or allowing for contextual adaptations
- Collaborative learning environments
- Coaching and learning frameworks available when needed
- Learner-led questions that foster genuine collaboration between educators and students
- Learners generating content relevant to their needs
- Reflective practices such as journals, experiential tasks, and real-world action research
- A focus on inquiry-based learning and adaptive thinking

Heutagogy is considered a natural progression from pedagogy to andragogy. While heutagogy supports full learner autonomy, less experienced learners may still require guidance. As Blaschke [14] outlines, key differences between andragogy and heutagogy include:

- *Andragogy*: A self-directed approach involving single-loop learning, skill development, linear processes, and educator guidance focused on content mastery.
- *Heutagogy*: A learner-directed approach featuring double-loop learning, capability development, non-linear methods, and a focus on understanding the learning process itself.

Richardson et al. [15] further explain the distinctions among pedagogy, andragogy, and heutagogy:

- Pedagogy (educator-led learning): The educator controls content, resources, and pace. Learners rely heavily on the teacher, follow a sequential structure, and are extrinsically motivated (e.g. by parents or teachers).
- Andragogy (self-directed learning**)**: Learners take more responsibility, seek guidance when needed, and are intrinsically motivated. Educators act as facilitators, encouraging independent exploration and interdisciplinary thinking.
- Heutagogy (self-determined learning): Learners are self-motivated problem-solvers who embrace complexity and uncertainty. They take full responsibility for their learning, which is inquiry-driven, flexible, and long-term. Educators support by shaping a rich learning context that promotes curiosity, collaboration, and relevance.

3.2 Curriculum Development

The Community Education curriculum is a structured plan that outlines the content, learning materials, and teaching methods used to guide learning activities in non-formal education settings (outside of the traditional school system). Its implementation places a stronger emphasis on delivering specific knowledge and skills to help individuals adapt to changes in society and advancements in science and technology. This type of curriculum focuses on equipping people with practical abilities to thrive in a rapidly evolving world.

Key characteristics of the Community Education curriculum include:

1. Jointly identified learning needs,
2. Co-designed with community input,
3. Developed collaboratively with local communities,
4. Evaluated collectively,
5. Adaptable to local changes and conditions, allowing for flexibility,
6. Involves active participation from community members in its development.

Unlike formal schooling, Community Education doesn't follow a rigid national standard. While it shares the overarching purpose of education—to develop knowledge, technology, and life skills that prepare individuals to contribute meaningfully to society—it differs primarily in structure and recognition. The main distinction lies in legitimacy or formal certification. Community-based education tends to be more flexible and inclusive of local voices and needs.

The curriculum for community or out-of-school education includes several components. Its overarching aim is to improve the quality and potential of human resources through lifelong learning. As noted by SEAMEO [21], community education aims to foster knowledge, attitudes, skills, and values that empower individuals or groups to participate effectively in their families, workplaces, communities, and the broader nation.

This approach not only provides learners with practical knowledge and attitudes but also supports their ability to realise their potential within their communities. It prioritises meeting individual and community needs, particularly through lifelong learning tailored to personal and social development.

According to Government Regulation No. 73 of 1991 [22], the objectives of non-formal or out-of-school education include:

1. Supporting individuals to grow and develop from an early age and throughout life, enhancing dignity and quality of life;
2. Equipping learners with the knowledge, skills, and mindset necessary for self-development, employment, or further study;
3. Addressing learning needs within the community that cannot be fulfilled through formal schooling.

Table 1. Learning Outcomes Description

Competencies	**Aspect**	**Description**	***Learning Outcomes*)**			
			Educator	**Manager**	**Researcher**	**Entrepreneur**
Able to utilize science and technology in his/her field of expertise and able to adapt to	Attitude	Applying the principles, approaches, strategies, and methods of social andragogy in the	√	√	√	√

situations faced in solving problems		planning of training programs, community outreach, empowerment initiatives, and other forms of non-formal and informal education.				
		Delivering training programs, community empowerment activities, and various non-formal and informal education programs in alignment with social andragogical principles, ensuring the approach is learner-centred and community-focused.	√	√	√	√
		Assessing and evaluating training, outreach, community development, and other non-formal and informal education efforts using the frameworks, strategies, and methods grounded in social andragogy to ensure relevance, effectiveness, and community impact.	√	√	√	√
Mastering the theoretical concepts of a particular field of knowledge in general and the theoretical concepts of specific parts of	Knowledge	Having a strong grasp of a range of human behaviour theories, with particular emphasis on andragogy, social pedagogy, critical pedagogy, and lifelong learning.	√	√	√	√

that field of knowledge in depth, and being able to formulate procedural problem solving.		Possessing a thorough understanding of key concepts within the human behavioural sciences—especially in the areas of andragogy, social pedagogy, critical pedagogy, and lifelong education—to effectively take on roles as an educator and program manager in training, counselling, community empowerment, and other forms of non-formal and informal education.	√	√	√	√
Able to make strategic decisions based on information and data analysis and provide guidance in selecting various alternative solutions.	Skills	Able to make strategic decisions based on analysis, information, and data, as well as provide guidance in selecting various alternative solutions independently and in groups in the fields of training, counseling, community empowerment, non-formal education, and informal education.	√	√	√	√
		Able to apply creative innovative ideas in training programs, outreach, community empowerment and other non-formal and informal education.	√	√	√	√
Responsible for own work and can be given responsibility	Managerial	Able to play a role as a motivator, communicator, facilitator, designer,	√	√	√	√

	developer and implementer of training programs, counselling, community empowerment and other non-formal education as well as informal education in a professional and accountable manner.				
	Able to utilize and review science, technology and art in the management of training programs, outreach, community empowerment and other non-formal education as well as informal education based on the principles, principles, approaches, strategies and methods of social andragogy.	√	√	√	√

4 Conclusion

The community education curriculum refers to a structured set of plans and arrangements that outline the content, learning materials, and teaching methods used to facilitate educational activities in non-formal or community-based learning settings. This form of education places a strong emphasis on equipping individuals with practical skills and expertise in specific areas, enabling them to adapt to the demands of a rapidly evolving world shaped by technological and societal advancements.

Key characteristics of the community education curriculum include being jointly identified, collaboratively planned and developed with the community, and collectively evaluated. It also allows for flexibility and adaptability in response to changing local contexts. Program development is highly participatory, involving community members throughout the process.

The main components of the curriculum consist of:

- Goals and objectives: Focused on developing individuals' potential and improving the quality of human resources through lifelong learning.
- Content: Tailored to suit the specific aims of the program.

- Teaching strategies and methods: Designed to be flexible and adapted to the learners' needs, learning materials, and contextual circumstances—ensuring they are simple, effective, and efficient.
- Evaluation: Conducted continuously and informally, serving as a tool to assess whether the program's learning objectives are being met.

In essence, community education supports personal and social development by offering accessible, adaptive learning that aligns with local needs and promotes lifelong learning for all.

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