CONSTRUCTION AND VALIDATION OF A HEUTAGOGY SCALE FOR UNDERGRADUATE STUDENTS

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ABSTRACT

Heutagogy, or self-determined learning, has emerged as a progressive instructional paradigm that places full responsibility for learning in the hands of the learner. This study examines the level of heutagogy practices among undergraduate students in arts and science colleges in Salem District. Using a quantitative normative survey method, data were collected from 110 students selected through stratified random sampling. A researcher-developed Heutagogy Scale containing 30 validated items across six dimensions explore, create, collaboration, connect, share, and reflect was used for data collection. Reliability testing using Cronbach's alpha yielded a value of 0.847, indicating strong internal consistency. The study highlights the extent to which learners demonstrate autonomy, self-reflection, creativity, and collaborative abilities in their learning processes. Findings contribute to understanding how heutagogy skills can enhance learner motivation, adaptability, and capability development in contemporary higher education settings.

KEYWORDS: Heutagogy, self-determined learning, undergraduate students, collaboration, reflective learning, higher education.

1. INTRODUCTION

Education is the process of acquiring knowledge, skills, values, and attitudes through formal, informal, and non-formal learning experiences. It enables individuals to develop intellectually, socially, and morally to contribute meaningfully to society. Education is a

process that teaches you to despise what you should despise and love what you should love (Plato, 1926). It has evolved significantly over the years, transitioning from traditional teacher-centered methods to more learner-centric approaches. One such advanced learning paradigm is heutagogy, which is also referred to as self-determined learning (Hase & Kenyon, 2000). Heutagogy extends beyond pedagogy (teacher-directed learning) and andragogy (self-directed learning for adults) by placing complete ownership of learning in the hands of the learner. This approach fosters autonomy, self-reflection, and the ability to apply knowledge in real-world scenarios, making it highly relevant in today's fast-changing educational landscape. The term heutagogy was introduced by Stewart Hase and Chris Kenyon in 2000, emphasizing a shift from structured learning to a more flexible, learner-driven process. Rooted in constructivist and connectivism theories, heutagogy encourages learners to take responsibility for their learning journey, setting their own goals, exploring resources, and engaging in self-assessment (Blaschke, 2012).

Meaning of Heutagogy

Heutagogy is a learner-centered educational approach that focuses on self-determined learning, where learners take full responsibility for what, how, and when they learn (Hase & Kenyon, 2000). Unlike traditional learning methods, heutagogy emphasizes learner autonomy, self-reflection, and adaptability, allowing individuals to develop skills and knowledge in a flexible and self-directed manner. The term heutagogy originates from the Greek word heuriskein, meaning to discover, highlighting the idea that learning is a self-driven process of exploration and discovery (Blaschke, 2012). This approach is particularly relevant in the 21st century, where rapid advancements in technology and access to digital resources enable learners to acquire knowledge independently, beyond formal education settings.

2. Literature review

Anjana Krishna et al (2025) studied reimagining English language teaching: towards developing a hauntological framework. Results revealed that the various tenets of heutagogy and its practicality in the Indian context. We investigated how teachers are incorporating aspects of heutagogy in their English classrooms and what major challenges are encountered. David Stoten (2024) studied developing individual capability in organizations through the promotion of heutagogy. Findings of the study heutagogy is concerned with the development of individual capability through the creation of a learner-determined curriculum that is

attuned to professional goals. Abdullah Abdul Halim and Noor Dayana Abd Halim (2024) analyzed effects of online heutagogy approach in learning science via telegram towards pupils' science process skills and creative thinking skills. Findings showed that the there was significant difference between pre- and post-test scores for both skills after integrating the heutagogy approach. Sumathy Ramas et al (2023) investigated heutagogy approach in education system: a systematic review. Results of the study, there are several advantages to using the Heutagogy approach in education, such as improved mentoring skills for the heutagogy approach, increased SDL among adult students and the development of information and communication technology abilities.

3. Objectives

- To evaluate the reliability and validity of the researcher-developed Heutagogy Scale.

4. Research Methodology

The present chapter signifies the methodological framework of the study and consists of the following aspects:

Table-1 Summary of Research Methodology Components.

S. No.	Component	Description
a)	**Method**	Quantitative survey method used to systematically collect and analyze data from a large group of respondents.
b)	**Population**	Undergraduate students enrolled in arts and science colleges in Salem District, Tamil Nadu.
c)	**Sample of the Study**	110 undergraduate students selected from arts and science colleges.
d)	**Sampling Technique**	Stratified random sampling based on strata like gender, academic discipline, and institution type.
f)	**Research Design**	Normative survey research design used to examine existing conditions and relationships.
g)	**Tools Used**	Heutagogy tool was developed by the investigator
h)	**Collection of**	Data collected through structured questionnaires administered in

S. No.	Component	Description
	Data	classrooms with prior permissions.

5. Tools used

For the study titled as construction and validation of a heutagogy scale for undergraduate students.

[a] Construction of Heutagogy scale

Heutagogy scale was developed by the investigator of undergraduate students containing thirty items and six dimensions viz, explore, create, collaboration, connect, share, reflect. The maximum scale value: 150, Minimum value: 30 The reliability value is 0.847.

[b] Pilot Study – Heutagogy

The validated questionnaire was administrated to 110 students and the data have been collected. The student responses and their reactions while administering the tool were considered for improving the tool and based on the students and teachers' opinions, hence few changes in the questionnaire was made.

[c] Time

For the initial draft, 60 minutes were allotted to the respondents to finish the test. But, during the administration of the initial draft it was experienced that most of the respondents had finished the test within 40 to 60 minutes of time duration. Therefore, for final draft of the test duration of test was fixed 40 minutes.

[d] Tryout of the Items

Initial daft of the test was administered on 110 students. Responses for the questions in this test were asked on answer sheets which were provided to all the students along with test booklet. Question booklets and separate scoring keys were prepared by the researcher and validated by five experienced faculties as well as experts. The score obtained by the student on each item was added to get heutagogy score of that student.

[e] Item Analysis

The heutagogy scale was constructed in accordance with established measures. In order to test the internal reliability of the heutagogy scale, a reliability analysis was run. The internal consistency was measured based on an average inter-item correlation. Total inter-item-correlations were used to identify items which were poor discriminators so they could be eliminated. To begin with, all items with negative correlation values were deleted. Then the

items had correlation coefficient between 0.03 and 0.07 were selected for further analysis. The items had inter-item correlations of less than 0.30 were deleted items and more than 0.70 were selected items. For the item analysis the investigator collected data for a sample of 110 response sheets.

Table-2: Table Showing the Item Analysis of the Draft Heutagogy Scale.

Statement No	'r' value	Accepted or rejected
1	0.581	Accepted
2	0.472	Accepted
3	0.694	Accepted
4	0.542	Accepted
5	0.270	Rejected
6	0.477	Accepted
7	0.239	Rejected
8	0.812	Accepted
9	0.334	Rejected
10	0.766	Accepted
11	0.592	Accepted
12	0.591	Accepted
13	0.743	Accepted
14	0.791	Accepted
15	0.822	Accepted
16	0.819	Accepted
17	0.784	Accepted
18	0.720	Accepted
19	0.722	Accepted
20	0.835	Rejected
21	0.819	Accepted
22	0.802	Accepted
23	0.798	Accepted
24	0.823	Accepted
25	0.637	Accepted
26	0.684	Accepted
27	0.739	Accepted

28	0.745	Accepted
29	0.718	Accepted
30	0.793	Accepted
31	0.273	Rejected
32	0.498	Accepted
33	0.599	Accepted
34	0.637	Accepted
35	0.692	Accepted

The items having item total analysis were decided to be eliminated. Therefore, out of 35 items, 5 items were deleted. The remaining 30 items were retained in the final form of the tool.

[f] Reliability

The reliability of the tool was recognized using Cronbach's alpha method. It is a reliability test conducted within SPSS to measure the measuring instrument's reliability (Questionnaire).

Table – 3: Table Showing the Reliability Value of Heutagogy Scale.

Scale	Statements	Formula	Reliability Value
Heutagogy	30	Cronbach's Alpha	0.847

The estimated reliability of the scale in the present study is very high (Cronbach's alpha 0.847).

Table – 4: Table Showing the Dimension Wise Reliability Value of Heutagogy Scale.

S.No	Dimensions	Reliability Value(α)
1	Explore	0.794
2	Create	0.682
3	Collaboration	0.733
4	Connect	0.817
5	Share	0.835
6	Reflect	0.762

[g] Validity

The test items were written with suitable instructions to the undergraduate students to make it easier to answer and facilitate scoring. The items, thus pooled, were scrutinized by the

investigator in consultation with education experts. The test items were modified according to the suggestions given by the experts in the field of education. It ensures the face validity of the tool.

[h] Scoring

The heutagogy scale comprises of 30 items. It is having a five- point scale. All the selected 110 undergraduate students were again administered after a gap of one week to indicate their response to each of the 30 statements on a five- point scale. Maximum value: 150, Minimum value: 30.

Table – 5: Table Showing the Scoring Procedure.

Responses	Scores
Strongly agree	5
Agree	4
Not Satisfactory	3
Disagree	2
Strongly disagree	1

6. Collection of Data

The investigator personally visited the selected colleges with the permission of the principal of the college. The students who attend the colleges on the day of collection of data are considered for the purpose of the investigation. The students were given necessary instructions about the various tools and motivated to respond genuinely to all the items. The heutagogy scale of undergraduate students were administered.

7. CONCLUSION

The study highlights the growing relevance of heutagogy as a learner-centered approach in higher education, particularly in empowering students to take ownership of their learning journeys. Undergraduate students in Salem District demonstrated varying levels of heutagogy competencies across dimensions such as exploration, creativity, collaboration, reflection, and knowledge sharing. The validated Heutagogy Scale proved to be a reliable and effective tool for assessing self-determined learning behaviors, with a strong reliability coefficient (α = 0.847). As education continues to shift toward digital and experiential modes, heutagogy offers a meaningful pathway for developing learner capability, adaptability, and lifelong learning skills. Institutions are encouraged to integrate heutagogy practices through flexible

curricula, digital tools, collaborative projects, and reflective learning activities to cultivate independent, self-motivated learners equipped for the demands of the 21st century.

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