

Development of in College Literacy Enhancement Program in the Digital Era

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Abstract

This study aims by to develop an instructional model for literacy promotion education utilizing the classification of 'fluid intelligence' and 'crystallized intelligence.' As a measuring tool, 7-item questionnaires developed by EBS was used. was partially revised and used. The survey was conducted on 50 college students by a convenience sampling. As a result, it was found that Korean college students showed great weakness in 'Reasoning literacy' among the Sub-content of literacy. Therefore, this study presents a teaching model focusing on improving functional reasoning literacy. This study is meaningful in that it did not only present the necessity of literacy education, but also suggested improvement plans as a specific methodology.

Introduction

Literacy is defined as 'the ability and willingness to learn and write in a way required by the social context to construct meaning through writing' (Center for Korean Literature & Language Education, 2006). Literacy determines the success or failure of subject learning and is essential for individuals to obtain the necessary information and lead their lives as civilized people in modern society (Lee, 2019). Due to massive use of digital devices among young adults the time spent in reading and writing has dramatically dwindled (Spitzer, 2012), and it is highly anticipated that the literacy ability has decreased. However, most of the preceding studies only highlight the necessity of literacy education, and there are no specific suggestions on how to plan and practice education (Park, et al., 2017). In addition, the literacy promotion program is also focused on solving illiteracy than enhancing literacy, so literacy education programs for young people are insufficient. Therefore, this study focuses on youth literacy, which has relatively few research cases in previous studies, and its purpose is to present an effective literacy enhancement education program.

Literature Review

The theoretical background is as follows. First, fluid intelligence, which is the basis for literacy, declines from the 20s. According to Cattell (1967), intelligence is divided into crystallized intelligence developed by the influence of education and environment and fluid intelligence developed by genetic and physiological influences.

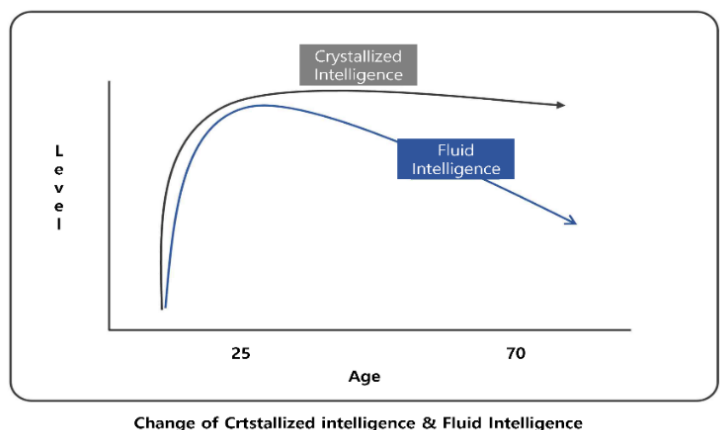


그림 1 Cattell's Fluid intelligence and crystallized intelligence (Cattell, 1967)

It can be seen that literacy is based on basic cognitive ability in that it is the ability to perceive sentences and paragraphs, recognize them, and grasp the flow and context of the text. In other words, literacy is due to fluid intelligence. This fluid intelligence gradually declines as it enters its youth in their 20s. At this time, literacy based on fluid intelligence also declines. Accordingly, in order to maintain literacy above a certain level, literacy based on crystallized intelligence is required. Crystallized intelligence is developed through acquired elements such as education, so it can be fostered through educational support. therefore, we develop university liberal arts class to prevent a decline in literacy at a time when fluid intelligence begins to decline.

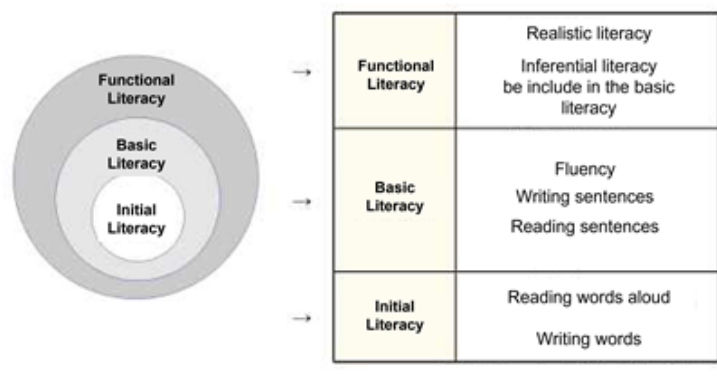


그림 2 Developmental stratification of Literacy (Lee, 2019),

Methodology

The researchers assumes that the level of literacy of youth has reached 'functional literacy' given that the subject of the study was focused on college students. Seven-question literacy measurement tool (EBS, 2021) was adapted and used. Three questions measure inference literacy and 4 measure fact literacy. Fifty university students were conveniently selected to participate in the study. The analysis results are as follows.

As a result of the survey, it was confirmed that the incorrect answer rate was higher in the questions measuring the 'inference literacy' than the questions measuring the 'fact literacy'. This indicates that the inference literacy is deficient among functional literacy. Therefore, the models of instruction developed in this study aims to cultivate the literacy of college students, focusing on inference literacy.

In this study, the book 'Read, transcribe, and discuss (Seo, 2020)' were referred to in the development of lectures to improve literacy. Liberal arts lectures were developed through tools such as reading, transcription, and discussion, and the lecture plan was attached to the appendix.

This study attempted to further expand the definition and problem consciousness of the concept of literacy presented in previous studies. In particular, it is significant in that it developed and presented a literacy class model for college students, focusing on the fact that efforts to improve literacy did not lead to specific plan and there lacks literacy program for young people. The researchers believe that this can provide the direction for future research on methods for improving literacy.

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Appendix

Syllabus

Subject Outline	
Course outline	<p>The purpose of this course is to improve literacy, which is an essential knowledge for college students to have in modern society, and to master how to apply it in real life.</p> <p>Literacy is the ability to grasp the essence of writing, analyze and reuse it in one's own language. And through the improvement of literacy, university students can have no difficulty in accessing various documents and texts, and use it in conjunction with their major and personal abilities.</p> <p>Writing - Students can learn the author's pattern of thinking through writing. According to previous studies, writing helps understand the author's thoughts beyond simply copying the text and cultivate in-depth understanding and reasoning ability of the text (Yoo & Seo, 2021).</p> <p>Reading - Students promote 'visualization of paragraphs' by reading a given article. When reading, by imaging the contents of the text, it is possible to easily grasp words and contexts that are not understood in the process of reading the text (Seo, 2020).</p> <p>Summary - The summary is not just a reduction in writing, but a high understanding of the writing is required in that it is necessary to maintain the core of the writing while reducing the writing.</p> <p>Discussion - Literacy is defined as "the ability to compose the meaning of writing and read and write in a way required by the social context." (Korea Institute of Literature and Education) Therefore, it is possible to write and cultivate active literacy through discussion (Seo, 2020).</p> <p>Through this, college students can play an independent and active role as members of smooth college life and modern society.</p>
Guiding Notes	<ol style="list-style-type: none"> 1. Students' literacy levels are identified through literacy tests. 2. Reading, writing, and discussion learning are conducted based on reading materials from various fields. 3. Students develop correct reading habits through continuous reading practice. 4. Students develop practical communication and literacy skills that can be used in various situations.
How to solve problems	<p>Reading</p> <p>Writing, Analysis & Criticism</p> <p>A group discussion</p> <p>Summary</p>

Weekly lecture plan

week	contents of class	the scope of the textbook and assignment	Note
1	OT / Literacy test	literacy measurement scale	preparation of instructor
2	An introductory class & Reading 1		
3	An introductory class & Reading 2		
4	Understanding paragraphs & Criticism 1	Submission of writing assignment (reading document)	
5	Understanding paragraphs & Criticism 2	Submission of writing assignment (reading document)	
6	Understanding paragraphs & Criticism 3	Submission of writing assignment (reading document)	
7	A summary lecture		
8	Midterm	summary test	
9	Group discussion 1 (Theme: Discriminate)	Submission a text of discussion (team 1) & critical text (other team)	
10	Group discussion 2 (Theme : History)	Submission a text of discussion (team 2) & critical text (other team)	
11	Group discussion 3 (Theme : Art)	Submission a text of discussion (team 3) & critical text (other team)	
12	Group discussion 4 (Theme : Environment)	Submission a text of discussion (team 4) & critical text (other team)	
13	Group discussion 5 (Theme : Technology)	Submission a text of discussion (team 5) & critical text (other team)	

14	Solving problems of literacy		Facilitated by the instructor
15	Solving problems of literacy	Development of five questions of literacy in each group	Facilitated by students