Program Description:

UFLI, is an early reading, structured literacy program put out by the University of Florida, Language Institute. The institute is a non-profit organizaton and most of the components of the program are free. The lead designer of the program is Dr. Holly Lane. Of whom, I am a bit of a fan. I view Dr. Holly Lane to be one of the best researchers in this field. I find that she consistently sticks to what the scientific evidence shows, when she gives reading instruction recommendations. With this in mind, I must admit, I have a bit of bias in reviewing this program, as:

-I want to support non-profit organizations

-I am a fan of Dr. Holly Lane's work

-Overall this program conforms to my personal interpretation of scientific research.

That said, I will do my best in this article to objectively review the UFLI program.

According to the UFLI website, the program:

"UFLI Foundations provides teachers with detailed but easy to follow lesson plans that all follow this eight-step routine:

Phonemic Awareness Visual Drill Auditory Drill Blending Drill New Concept Word Work Irregular Words Connected Text

Steps 1 through 4 serve as a warm-up and review of previously taught concepts. Step 5 is an explicit introduction to a new concept including guided practice reading and spelling words. Steps 6 through 8 are opportunities to apply concepts through reading and writing activities at the word and text level."

To the best of my knowledge, the UFLI is a scripted program which teaches phonemic awareness, decoding, irregular words, morphology, spelling, and fluency. The program is explicit, and can be individualized to student needs. While it does have scripted lessons, the components are also available free online, for teachers to use as they wish. It is primarily aimed to support the decoding strand of Scarborough's rope, for core instruction.

Methodology:

In order to analyze the efficacy of UFLI, I first conducted a systematic search. I searched for studies on UFLI, on the company website, on Google, in the ERIC database, and in the Education Source database. The initial search found 15 records. However, only 1 located record was an experimental study on the new UFLI Foundations program.

Myself and two additional researchers for Pedagogy Non Grata analyzed the study. In order to measure the experimental efficacy of the UFLI program, we calculated Cohen's d effect sizes. Effect sizes were calculated by dividing the mean difference between the reported on

post tests of the treatment group and the control group by the weighted standard deviations. Effect sizes were calculated by the first author and then replicated by the second author to insure reliability.

Results:

The UFLI study was published by Nicholas Gage in 2023, for the independent research firm, West Ed. The study used a cohort design and compared the DIBELS scores of 2021 students in Florida who had used the program to 2020 students who did not have access to the program. "The DIBELS assessment includes several subtests and an aggregated composite score. The following subtests, each measuring a specific reading component skill, were included in this study: Letter Naming Fluency (LNF), Phonemic Segmentation Fluency (PSF), Nonsense Word Fluency–Correct Letter Sounds (NWF–CLS), Oral Reading Fluency (ORF), and the total aggregate score." The study included 1670 students in total.

Overall this study has many factors that make it more rigorous. It was a large scale study that used a standardized measurement. Large scale studies that use standardized measurements often show lower effect sizes. As such, these variables need to be accounted for when interpreting the results of the study. While the study did not randomly select participants, students were propensity matched at baseline to insure equivalence. At the start of the study, a mean effect size of .05 g was calculated by the authors. WWC defines equivalence as being less than .25 standard deviations. One limitation for this study, is that it was comparing the results of the 2021 school year with the 2020 school year, which could have been impacted by covid closures.

By comparing the post test differences between the treatment group and control group, using a Cohen's d effect size calculation, we found a mean effect size of .84 for kindergarten and .50 for grade 1, with an overall mean effect size of .66. The results of this study would suggest a strong efficacy for this program. The authors of the UFLI study, used a different effect size calculation method than Pedagogy Non Grata and they found the following, "The effect size, controlling for pretest, was g = 1.20 for kindergarten students and g = 1.42 for 1st grade when using the pretest standard deviation in the effect size calculation."

Figure 1: *Gage 2023 Test Results*

	Pretest Mean score	Pretest Standard deviation	Posttest Mean score	Posttest Standard deviation
Kindergarten control	274	18.9	397	24.4
Kindergarten UFLI	275	19.5	421	32.1
1st grade control	320	8.6	427	22.0
1st grade UFLI	321	8.2	440	29.9

Summary:

UFLI is a core instruction decoding program. It was developed by researchers, as part of a non-profit initiative. The program is both research based and evidence based. To the best of our knowledge, UFLI has one large scale cohort study that used standardized assessments. The results of this study were large and suggest a strong level of efficacy. The study did have some limitations, the sample was not randomized and the design might have been impacted by Covid. We would like to see further replication of these results. However, the initial results are impressive.

Final Grade: A-

A single rigorous study showed a mean effect size of .40 or higher. For information on how we grade programs: <u>https://www.teachingbyscience.com/_files/ugd/237d54_7e97b8ff3af94bffb470bb3e41237e9a</u>.pdf

Qualitative Grade: 8/10

The UFLI program includes the following essential types of instruction: phonemic awareness, phonics, morphology, spelling, explicit, and individualized.

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References:

Gage, N. (2023). Districtwide Pilot Study of UFLI Foundations. *Wested.* <u>https://www.wested.org/wp-content/uploads/2023/05/Districtwide-Pilot-Study-of-UFLI-Found</u> <u>ations.pdf</u>

UFLI. (2023). What is UFLI Foundations. https://ufli.education.ufl.edu/foundations/