

ABSTRACT

Name Of Institution: De La Salle University - Dasmariñas
Address: Dasmariñas, Cavite
TITLE: PSYCHE Expert System:
The Prolegomena IQ Testing
For Higher Elementary and Above
PROPONENT: Magnolia Opeda Balite
FUNDING SOURCE: Parents **FUNDING COST:** P2,500.00
DATE STARTED: December 1996 **DATE COMPLETED:** February 1997

OBJECTIVES OF THE STUDY**A. GENERAL**

To make the computerized IQ Testing operate like an expert psychologist. To present a set of routines for an efficient, interactive and time-consuming IQ Testing.

B. SPECIFIC

To formalize human intuition in the form of PSYCHE through the special utilization of the program development cycle and programming techniques based on the approach of the famous Psychologist, Spearman.

SCOPE AND LIMITATION

// The special problem focuses on the development of the system and the formalization or the computer representation of the expert's knowledge. (On the field of study) it focuses exclusively on IQ testing and evaluation based on the reliable Spearman's Testing Approach. In addition to the PSYCHE system, a personality evaluation is included as a supplementary feature. However, this system does not include the whole topic on psychology like psychoanalysis. //

METHODOLOGY

This study utilized the following: Spearman's Testing Approach, Interruption Analysis, Waterfall Model, Forward Chaining, , and Structured Induction which are further discussed in Chapter 3.

OUTPUT OF THE STUDY

The study on expert system features the capabilities such as push buttons, easy IQ testing, and automatic score evaluation. It also includes features on printing user records, deleting, appending, and viewing. The system gives an interactive approach of IQ testing so as to encourage users to boost or improve their IQ.

CONCLUSIONS

In conclusion, the PSYCHE Expert System was made possible by the use of computer as a tool for problem-solving processes. In relation with this, the system achieved good quality on the output for each step as much as possible on program development. Not only does the program development cycle speed up the development of the system but it also prevents possible errors that would affect the other steps in the development process. On the other hand, knowledge representation plays a significant role if one is to develop an expert system. The use of the concept of the Propositional Logic is appropriate to represent the intuition of the subject expert for it is focused on handling a set of conditions and a conclusion that is warranted given the conditions. Similarly, acquisition of knowledge and Spearman's testing approach is important for it facilitates methods on how to handle individuals through good question assessments.

RECOMMENDATIONS

Due to time-constraint, the proponent has failed to include one topic. It is highly recommended to future researchers who would want to pursue developing this system to improve the study by adding the topic on supporting intuitive debugging of PSYCHE. This

feature can explain further the system reasoning as presented by the knowledge engineer and as acquired from the expert at hand.

On the software interface, it is then preferable to include topics such as review on the system about Psychological Testing and how one can improve his IQ.

