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INTRODUCING PHILOSOPHY INTO THE PRE-UNIVERSITY EDUCATIONAL SYSTEM

by

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ABSTRACT

History provides many examples of new skills being needed by members of a changing society. Education has anticipated these needs and adjusted the curriculum, goals, and technologies of education accordingly. Many contemporary authors agree that one predominant characteristic of future societies is the rapid rate of change in technology and social systems. Education must develop the tvpe of societal member who has the skills and motivation to learn throughout his lifetime. These learners must be self-motivated and are usually called Adult Learners. The basics of adult learning should be developed and practiced prior to the university, and incorporated in all school courses. There are a number of alternative technologies to implement adult learning. Andragogy is a technology to teach adults, and is based on an assumption that adults learn differently than children. Philosophical Inquiry is an alternative technology that promotes the love of inquiry that characterizes the adult learner. Philosophical Inquiry has a number of advantages as a technology: it starts with a child's natural philosophical mind, it can be incorporated in all science and humanities classes, it has its own history of great thinkers and ideas, and it is proper material for adults.

An experiment was conducted to determine if students who are introduced to philosophy indicate an interest level that would support the systematic introduction of philosophy to pre-university students. A Philosophy Interest Survey was developed and administered to twenty-six college undergraduate students after they had received a semester of philosophy. The Philosophy Interest Survey was reduced and administered to two groups of high school seniors who were taking an English class in Greek Mythology. The first group received a three-day introduction to Philosophy, and the second group received no introduction. The results showed strong positive reaction by both college and high school students who received an introduction to philosophy. Neither group showed any clear-cut motivation for taking courses in Philosophy. Both groups agreed that philosophy could be successfully introduced into the high school, and that a course in the History of Philosophy was best suited for high school students. These answers indicate that there is sufficient interest towards philosophy to support its introduction into the pre-university school system.

Chapter 1

INTRODUCTION

> The teacher of philosophy . . . wants in fact to make him [the student] prefer rationality over irrationality, the giving of reasons over the plumping for unexamined views. (Scolnicov, 1978).

Whereas Greek Mythology had reflected Man's concept of a Universe directed by external forces, the emergence of Philosophy reflected Man's growing confidence in his ability to understand the natural universe and to control, to some extent, his own destiny. The pursuit of philosophic inquiry by these early thinkers contributed to an accelerated growth of this confidence within society. This accelerated growth in confidence became a characteristic of Greek society and was reflected in the emergency of the Creek City-States. These were small, democratic communities that allowed freemen to participate in, and control, their political destiny. With the rise of these communities, the skills of rhetoric and jurisprudence were needed. The need for training members of society in these skills was met by the Sophists, who were considered travelling men of wisdom.

The Greek Sophists were the first professional teachers in Western Civilization. They turned their attention away from the

attempts of the early philosophers to explain the natural universe and towards a concern with the practical life of man. Their attempts became the first systematic approach in Western Civilization to meet the educational needs arising from a changing society.

History is filled with other examples of educational changes emerging to meet the challenge of a changing society. Recent examples of experiments at all levels of education in our country demonstrate the relationship between education and social changes. Community education took on an impetus during the Depression; Vista and Peace Corps were attempts to educate that portion of our civilization that had been bypassed by educational advances. Today's Universities Without Walls bring an education to those whose obligations preclude their full-time attendance at school.

Many contemporary authors have supported education's role in anticipating the needs of a changing society. Some of their positions are described later in this paper. While they may differ in their approaches to meeting the emerging needs, most seem to agree that one predominant characteristic of future society will be the accelerated rate of change in technology, in life style, and within the social fabric.

This study is based on a deductive evaluation of the trend in society, which is characterized by an accelerated rate of change. The implication of this trend for society is that its members can no

longer rely on knowledge and training received in the earlier years of life to last for their entire lifetime. There will be a need for future generations to learn throughout their lifetime. The implication for education is that it must prepare future generations to be Lifelong Learners. Like the Sophists of early Western society, educators should try to determine what new skills should be taught to meet societal changes. These skills will depend on the characteristics of the learner who would be better prepared to learn throughout life. Among these characteristics are: self-motivation and a desire for learning, which are characteristics often attributed to the Adult Learner. The selection of a technology will depend, in part, on which level in the educational system the technology is introduced. As it would be counterproductive to wait until a student has completed his secondary education until introducing him to a substantially different technology, it would appear valid to infer that the technology selected should be introduced prior to the university. This technology should promote the type of inquiry that leads to a continuous search for knowledge. Philosophic inquiry, which is a natural skill in children, could be developed to meet the needs of a society characterized by an increasingly rapid rate of change.

Need for the Study

The Review of Literature in Chapter 2 provides a discussion for each of the key points which resulted from the deductive evaluation in the paragraph above. This review provides the basis for an experiment to determine the feasability of introducing philosophy to pre-university students. The experiment includes the administration of a Philosophy Interest Survey to high school and college undergraduates after they received some introduction to Philosophy.

To date, there is little written on how the educational system can develop self-directed, adult learners. Most studies direct their efforts towards students who are already adults, but whose learning techniques need to be adjusted. It seems counterproductive to continue to develop learning techniques in younger students that require massive changes when they become adults. It would be more appropriate to develop the basis and basics of adult learning techniques throughout the student's educational development. A foundation is needed that develops the type of thirst for knowledge that motivates students to seek knowledge and truth at every turn. Classes designed to prepare and motivate learners to develop this type of inquiry would be neutralized if learners were then subjected to other classes that were based on opposing techniques. The need for inquiry must permeate our entire educational system.

The type of inquiry that pursues knowledge as a never-ending quest, an inquiry that promotes the use of reason, and an inquiry that provides self-fulfillment, may be described as philosophical inquiry:

> The teacher of Philosophy, however, especially, in school, wants more than merely to open before his students the possibility of thinking or acting rationally. He wants in fact to make him prefer rationality over irrationality, the giving of reasons over the plumping for unexamined views (Scolnicov, 1978).

Philosophical inquiry is an excellent method for introducing the types of thinking that have been characterized as adult learning techniques. But, if this type of inquiry is going to be successful. it must be introduced earlier into the educational system than it is currently being introduced.

Statement of the Problem

The problem explored by this study was: Does the interest level of students in the current educational system support an introduction to philosophical inquiry prior to entry into a college or university?

General Questions to be Answered

The following general investigative questions were determined appropriate in exploring the problem of the study:

QUESTION 1: Do respondents, who are introduced to philosophy, react favorably to that introduction?

QUESTION 2: Do respondents indicate they are better motivated by external direction (pedagogical orientation), or internal direction (andragogical orientation) towards taking courses in philosophy?

QUESTION 3: Are respondents, who are introduced to philosophy, in favor of having philosophy introduced prior to college?

QUESTION 4: Which course(s) in philosophy do respondents indicate would be best to introduce to high school students?

General Procedures

A Philosophy Interest Survey was administered to both college and high school students. The college group and one of the two high school groups received an introduction to philosophy prior to the administration of the survey.

The results of the Survey were analyzed separately for the college and high school groups. A comparison of responses was then made between the college group and the high school group who received an introduction to philosophy.

Definition of Terms

Adult Learning: Learning based on self-directed motivation and the use of all available resources to obtain skills and knowledge.

Andragogy: (Knowles, 1970) A technology for the education of adults; it is based on the Greek words Anēr, meaning "man," and Agogos, meaning "leading."

Pedagogy: (Knowles. 1970) As opposed to Andragogy, it is the traditional technology used in educational systems; it is based mostly on experiments with animals and children and the experiences of teachers of children subject to a system of compulsory attendance.

Philosophical Inquiry: The active pursuit of reasons rather than unexamined views (Scolnicov, 1978); an alternative technology for the development of self-directed learners.

Student Status: A designation used in this paper to express the differentiation between college and high school student status.

Limitations and Delimitations

The experiments in this paper were subject to a number of limiting factors. Most of the limitations are based on sample size available for the experiments. The following limitations have been identified:

1. The first survey was conducted among undergraduate students at one institution, attending three different classes. and having two instructors. A total of twenty-six students were enrolled in the three undergraduate Philosophy classes.

2. The college survey was administered at the end of the courses, after students, who may not have enjoyed the course, had the opportunity to drop out. In order to allow students the time to develop strong attitudes about philosophy, this experimental

technique was necessary.

3. The college survey included twenty-six students and many response categories had to be collapsed from a 5-point Likert type scale to an Agree/Disagree categorization to apply measurements.

4. The high school group received only three days of philosophy. Less than 20 minutes of overview of the field of philosophy was possible. The rest of the time was spent on content-oriented preparation. This was necessitated because of an agreement with the normal class instructor that, in order to justify using the class time for this experiment. the three days should have high educative value.

5. The introduction of philosophy to the high school experimental group was conducted by an intern, with only limited practical teaching experience, all of which had been at the college level.

6. The Philosophy Interest Survey itself is a limitation based on the respondents' truthfulness in answering the questions.

Chapter 2

REVIEW OF LITERATURE

> Not to know the relative disposition of things is the state of slaves or children; to have mapped out the universe is the boast, or at least the ambition, of Philosophy. (Newman. 1880, 1973)

The Review of Literature follows the deductive evaluation described in Chapter 1. It starts by identifying one of the primary characteristics of a future society that will have an impact on educational needs. This is followed by a review of the educational need to develop lifelong learners. Then, there is comparison of the self-directed. adult learner and the teacher-directed learner in an attempt to determine which would be a better lifelong learner. The selection of adult learning as a desirable goal leads to a further discussion of when it would be better to introduce adult learning techniques to students. Finally, there are comparisons made of the alternative technologies that could be utilized to effect adult learning skills.

Characteristics of Future Society

What will be the nature of the society for which students in future generations need to be prepared? To answer this question, we might look at which direction our past and present experiences point. Many writers have written about the technological growth of man and

its implications for society.

Our scientific and technological advances have been great. In fact, Kenneth Boulding (cited in Toffler, 1970), economist and social thinker, has placed this advancement in an historical perspective that leaves little to the imagination:

> The world of today . . . is as different from the world in which I was born as that world was from Julius Caesar's. I was born in the middle of human history, to date, roughly. Almost as much has happened since I was born as happened before. (p. 13)

This statement was made before the landing on the moon, cloning, and other major feats of science. Alvin Toffler (1970) has updated this perspective:

> [I]f the last 50,000 years of man's existence were divided into lifetimes, of approximately sixty-two years each, there have been 800 such lifetimes. Of these 800, fully 650 were spent in caves.
>
> Only during the last 70 lifetimes has it been possible to communicate effectively from one lifetime to another--as writing made it possible to do. Only during the last 6 lifetimes did masses of men ever see a printed word. Only during the last 4 has it been possible to measure time with any precision. Only in the last 2 has anyone anywhere used an electric motor. And the overwhelming majority of all the material goods we use in daily life today have been developed within the present, the 800th lifetime. . . . The 800th lifetime makes a sharp break with all past human experience because during this lifetime, man's relationship to resources has reversed itself. . . . Within a single lifetime, agriculture, the original basis of civilization, has lost its dominance in nation after nation. . . . Ten thousand years for agriculture. A century or two for industrialism. And now, opening before us--superindustrialism. (pp. 14-15)

It is not just a case of a world that is changing. What these writers are addressing is the rate of change. The rate of change has continued to accelerate throughout history. This rate of change has become a characteristic of our future society. As Knowles (1970) points out, we are entering into a strange new world where the only consistent factor will be rapid change. The implications for society are great.

Lifelong Learning

In view of a society that is characterized by rapid change, it is natural that the goal of education must be based on the needs that emerge as a consequent to this societal characteristic. Some examples from our current culture demonstrate that we have already entered a transition period. The doctor who graduated in 1970 could not practice medicine today without constant revision of his skills. The engineering graduate of 1965 is already in need of major updates in his area of specialization. The goal of education must be to develop in future generations the ability and desire to pursue learning throughout their lifetimes.

Knowles (1970) indicates that he concurs with previous writers who have rejected the theory that the goal of education is merely the transmittal of what is known. This was a valid goal as long as it was true that the time-span of major cultural changes was greater

than the life-span of an individual. This is no longer true.

The need for a constant, ongoing education as part of a design for the future of education has already been expressed (Kerber & Smith, 1962) in research texts. In a world characterized by rapid change, it is doubtful that an education which is accomplished in a few immature years will adequately prepare future generations for their roles in society. The learner of tomorrow will be vastly different than that of today.

Types of Learner

Wardell (1974), in an analysis of the current educational movement, applies the study of Futurism to course curriculum and the structure of the educational system. His report is based, in part, on the results of the Hawaii 2000 Conference. He is guardedly optimistic in his analysis because of the signs of potential in today's youth. These are the youth who are caught in a period of transition. They are no longer satisfied to accept the unquestioned views of those in authority. But, unlike the destructive students of the Vietnam era, these youth are willing to work hard to help create the society in which they must live and work. They are willing to work hard, but in meaningful directions.

If these students are to be successful, they will need more than raw ambition. They must be provided the proper tools to get

the job done. If there is a need for students to be Lifelong Learners, as already shown, then the tools they will need will be based on the nature of the student who we are trying to develop.

What type of learner will be most likely to succeed as a Lifelong Learner? Knowles (1973) distinguishes between the teacher-oriented and the self-directed learner. The former he sees as a passive student, sitting at the feet of the teacher. This type of student awaits an external motivation to begin and to continue the learning process. The self-directed learner, on the other hand, is motivated from within. Additionally, this type of learner does not rely on the school alone to provide his education. He sees all of life as an educational opportunity and uses all of the resources available for him to learn. In a society characterized by rapid change, the self-directed learner will flourish, while the teacher-directed learner will fall behind.

Alternative Levels of Introducing Concepts of Adult Learning

At what level of education should we introduce the basics of adult learning? If we assume that students should wait until they enter the university before they receive an adult learning technology, we encounter some immediate difficulties. First, the student will have already been trained for at least twelve years of education in a technology that does not promote adult learning.

Plato (1973) warned over two thousand years ago, in his Republic, that we must be very careful of what we introduce to the young. Those things that are taken into the mind of the young can prove to be unchangeable at a later time. Next, it appears counterproductive for education to take a piecemeal approach to meet an educational goal. The early years of education would be demoted to an educational technology that was inconsistent with the needs of its students. Then, when the student enters into an "adult" learning situation--such as a university--he must be restrained.

Finally, there is the difficulty that if education waits until a student enters the university to introduce adult learning techniques, many students who do not attend a university would never be introduced to adult learning techniques. It may end up that those who do not attend a university, but train in a labor skill, are the largest group to be affected by a society characterized by rapid technological change. We can conclude that it would be advantageous to introduce adult learning techniques prior to the university.

Andragogy vs. Pedagogy

Some recent studies (Knowles, 1973) have developed what is probably the beginning of an educational technology that will be with us for a long time. This technology, adopted from European educators, is called ANDRAGOGY. It is based on the Greek words

Aner, meaning Man, and Agogos, meaning Leading. It is a technology based on the assumptions that adults learn differently than children.

We will adopt this term, "Andragogy." Throughout this paper, it will be used to describe the technology that has Adult Learning as its goal. To give the term more meaning, we will juxtapose the terms and positions of Andragogy and Pedagogy.

Pedagogy refers to the traditional technology of educating children. Knowles (1973) also notes that most of what we know about learning is based on research with animals and children. Most of what we know about teaching is based on experience with teaching children under a system of compusory education.

It would probably be an invalid reference to state that the two technologies are so dissimilar that one is "right" and the other "wrong," or that one ends and the other begins with no overlap. Quite to the contrary, if there are differences, they are evolutionary.

What, then, are the distinguishing features of these technologies? Knowles (1973) lists four basic assumptions about the characteristics of adult learners that are different from the assumptionsof child learners.

First, it is assumed that in the process of maturing, a person's self-concept moves from that of a dependent personality toward that of a self-directed individual. Adults don't like to be treated as

children and will avoid those situations that would tend to treat them as such. More importantly, the adult is more committed and open to a learning experience that arises from internal motivation. This first criterion is very important in Andragogical learning theory. It distinguishes those who attend learning situations with a view towards "filling the block," "because I have to," "my father (boss) said to" from those who feel "I know why I'm here," "this will help me achieve my goals," or "it's what I know I want or need to do." It is characterized by dynamic and aggressive pursuit of knowledge, as opposed to the passive awaiting of knowledge in pedagogical learning theory.

Next, Andragogy assumes that the growing reservoir of experiences of the maturing person is a self-serving resource for learning. Additionally, the adult differs from the child in his perspective of his experiences. The child sees the experiences as something that happens to him; while the adult sees the experience as something which is identifiable to the self, a potential aspect of his own being. For example, the lady who says that she is a lawyer when asked to identify herself is summing up a large group of her personal experiences. The experiences themselves serve as a basis for understanding and learning for the individual and make him a valuable resource for learning to others.

The third assumption of Andragogy states that the maturing

person's readiness to learn is increasingly oriented to the developmental tasks of his social roles. The implications for the technology of Andragogy is that learning experiences should be timed to be in accord with the development tasks.

In the fourth assumption, a distinction is made between adult and child learners in terms of their time perspective in the application of the knowledge that is learned. Much of what the child learns has little more than academic value in the eyes of the child. The application of knowledge is postponed. Because the adult's time perspective is one of immediacy of application, his orientation towards learning shifts from one of the subject-centeredness to one of problem-centeredness.

Andragogy vs. Philosophical Inquiry

Knowles (1970) has described how each of his four basic assumptions of adult learners has implications for the technology of Andragogy. For example, his first assumption that the maturing person sees himself as a self-directed individual results in adults avoiding situations that tend to treat them as children. The implications for the technology of andragogy include adult-size furniture in the classroom, arrange meeting rooms informally, etc. That is, Knowles is dealing with a technology that is aimed at students who are already adults.

Frederick Oscanyan (1977) has provided further criticism of those who advocate a technology that attempts to teach a course in self-directed learning. He feels that it is contradictory to introduce a course in the fundamental of self-directed learning to teacher-directed learners. Nels Noddings (1978) responded to Oscanyan. Noddings feels that Oscanyan is correct in criticizing a content-laden course that teaches self-direction as subject matter. But the importance and the need for self-directed learners is real and teachers must be encouraged to promote self-motivation whenever possible.

There are several reasons to advocate a technology of philosophical inquiry. First, philosophic inquiry and education share fundamental goals:

> There exists a peculiar affinity between philosophy and education. At the heart of philosophy is interrogation and dialogue; at the heart of this discipline is therefore what is essential to education. The craft of philosophy contains within itself a pedagogy--the need for dialogue, the need for questioning and a method of inquiry--which are essentially characteristic of education in general. This is why education cannot be divorced from philosophy and philosophy cannot be divorced from education. (Lipman & Sharp, 1978, p. 259)

A second reason for advocating a technology of philosophical inquiry is that it meets the requirement to introduce the technology to pre-university students. Philosophical inquiry is natural to children. Pestalozzi (1898) advicates the ability of the child to think and be an <u>agent</u> in his intellectual education. This great

thinker recounts the thrill of his own philosophical discoveries as a child as a personal testimony to the ability of the child to pursue philosophical inquiry. Gareth Matthews (1978) contends that the child is a natural philosopher. He rues the lack of recognition in the school and at home for the child's philosophical thinking. Stephen Toulmin (1976) not only recognizes the natural ability of the child to ask reflective questions, but he warns that they should not be answered with conclusive factual answers. These questions are philosophical in nature and should be handled in such a way as to continue further reflection. It is important for the child's learning to be aware that there are questions deserving of pursuit despite the inability to give an absolute answer.

A final reason for advocating a technology of philosophical inquiry is that it can be introduced through formal courses in philosophy and through other courses in the sciences or humanities. Philosophy courses have the advantage of introducing students to the greatest philosophical thinkers as well as providing a basis for philosophical discussions. Ernest Nagel (1971) contends that philosophy can play an important role in meeting educational objectives with a cooperative reorganization of courses in the sciences and humanities:

> Philosophers can play a constructive role in the detailed formulation of a central educational objective. That objective, when stated in general terms, is to replace intellectual habits which tend to make men accept and retain unexamined beliefs by intellectual

> habits that place a premium on responsibly based thought. However, if this general objective is to be realized, the character of cogent reasoning must be set forth clearly, not simply in the abstract but in the context of teaching the concrete materials of various specialized domains of inquiry. In short, I believe that a supreme educational objective can be realized only if both the sciences and the humanities are presented to students not simply as miscellaneous bodies of useful and enlightened information, but as the fruits of a characteristically human method of intelligence. For organizing such presentations, there is needed expert familiarity with the credited outcome of educational research, and expert familiarity with the relevant distinctions and principles of logic. By participating in such a cooperative reorganization of the content of instruction, philosophy can make what I think is an invaluable contribution to educational practice. (pp. 259-260)

The advantages of philosophical inquiry and its capabilities to be introduced to pre-university students make it an excellent technology for the educational goal of developing self-directed, lifelong learners.

Summary

The review of literature describes at least one trend in society that will be an important characteristic of future society. That characteristic is the accelerated rate of change in most areas of society. Among the implications for society and education is the need to prepare future generations to become lifelong learners. The self-directed, adult learner will be better prepared than the passive, teacher-oriented learner to develop the skills of inquiry

needed to adjust to lifelong learning. The type of technology required must be flexible enough to become part of the total education system. Philosophical inquiry has many advantages, including flexibility, that indicate it is an excellent alternative technology.

The review is not all-inclusive. There are other characteristics idnetified by contemporary writers, other implications, and possibly other alternative technologies. The review is intended to provide the stimulus for further inquiry--a trait of philosophical inquiry. The use of the deductive evaluation allows a logical flow of thought and valid inferences based on a given statement. In this case, the evaluation is based on deducting what can be validly inferred from the trend of accelerated change in society. It is limited to inferences that apply to education.

If contemporary authors are correct in their predictions of the characterization of future society, and if the deductive evaluation in this paper is valid, the need to establish a technology that can be introducted to pre-university students within the total education system should naturally emerge. The next step is to "test the water," to determine if the interest of contemporary students who are introduced to some philosophy would support a systematic introduction to philosophical inquiry prior to entry into a university.

Chapter 3

DESIGN OF THE STUDY

The discussion of the design used for this study has been introduced with an overview of the functional problem that motivated the study's experiment. This is followed by a description of the procedures used to conduct the experiment used to investigate the problems of this study. And, finally, this chapter has considered the statistical methodology used to analyze the results of the experiment.

Functional Problem

At least one role of education is to anticipate the educational needs of a changing society. Historical experience, from the Sophists of Greece to contemporary American innovations, has validated this role. A current trend that may become a characteristic of future society is the accelerated rate of technology and societal changes. The implications are extensive for society and education. Man must be prepared for his new roles. Adult, lifelong learners must be developed through the educational system. Philosophy can add meaning and direction to adult learning if it can be successfully introduced to pre-university students.

Procedures

A Philosophy Interest Survey (Appendix A) was developed for

presentation to undergraduate college students enrolled in a course of philosophy at the College of Great Falls. The questionnaire was developed by following the guidance provided by Sherif, Sherif, and Nebergall (1965). The purpose of the survey was to determine if undergraduate college students--who would be closest, demographically, to high school students--would react favorably to a full semester of philosophy. This was necessary because it was not possible to directly introduce a full semester of philosophy into the Great Falls High School System. The Survey would be presented during the last two weeks of the semester to ensure a full acquaintance with philosophy.

The Survey of college students had the advantage that those surveyed would be out of high school long enough to be objective, but not too long to have forgotten their interests and capabilities while in high school. Thus, while establishing whether or not college students reacted favorably to an introduction to philosophy, it served to provide a fairly objective appraisal of whether or not they wished they had had that introduction in high school.

A second Philosophy Interest Survey (Appendix B) was developed for presentation to high school students. The purpose of this survey was to determine the attitude of high school students towards philosophy, and its possible successful introduction into high school.

Description of the Population

College Students. A survey was given to three different undergraduate philosophy courses at the College of Great Falls. The courses included one each of classes in Logic, Ethics, and Survey of Western Philosophy. Two different college professors were involved, and a total of twenty-six students were surveyed.

High School Students. A survey was presented to an experimental group who received three class periods of philosophy. The survey would also be given to a control group who were to receive no introduction to philosophy. Both groups were taking the same class in high school, but at a different time period. Both groups had the same instroctor.

The class selected was a senior year English class, studying Greek Mythology literature. The students had been studying this area for three months prior to the introduction of philosophy. The introduction to philosophy consisted of two-and-a-half classes of Greek Philosophy, and one-half class of answering questions on a wide range within the realm of philosophy. The experimental group consisted of 30 students, but only 26 students were present for all three days. The control group had 13 students.

The Philosophy Interest Survey was presented on the third, and final, day of the introduction. The Control Group was administered the survey on the same day.

Method of Collecting Data

College Students. The Philosophy Interest Survey for undergraduate college students consisted of 29 questions. Seven general information questions were used to establish a demographic base. Twenty-two interest survey questions were asked, most using a Likert-type five-degree scale. Survey questions could be categorized as follows: acceptability of philosophy once introduced to it; motivation for taking courses in philosophy; desirability of introducing philosophy into the high school; and areas of philosophy that would best lend adaptability to presentation in the high school. The survey was developed based on the recommendations of Sherif, Sherif, and Nebergall (1965).

The Philosophy Interest Survey for the high school groups had been reduced to 19 questions. The difference between the two surveys was due to the deletion of those questions from the college survey which were not applicable to high school students. The wording on some questions required revision. The survey of the college students took place approximately three months prior to the survey of the high school students.

Treatment of the Data

Descriptive Presentation. Each item of the college survey and the high school survey were analyzed separately. Frequency of

response and percentages form the basis for the analysis.

Statistical Analysis. The statistical presentation was used to test the following null hypotheses:

Null Hypothesis$_1$: Reaction to an introduction in philosophy is independent of student status (i.e., independent of whether the respondent is a college or high school student).

Null Hypothesis$_2$: Motivation towards taking courses in philosophy is independent of student status.

Null Hypothesis$_3$: Reaction to introducing philosophy prior to college is independent of student status.

Null Hypothesis$_4$: Choice of which course in philosophy to introduce to high school students is independent of student status.

The Chi Square Test of Independence was used to test the null hypotheses. The .05 level of significance was used and df = 1.

Chapter 4

RESULTS

The purpose of this study was to determine the level of interest in philosophy among students in the current educational system, and to determine if the level of interest differs between high school and college students after an introduction to philosophy. Two Philosophy Interest Surveys were developed for this study. The first was a twenty-nine question survey, given to twenty-six undergraduate college students. The second survey had seventeen questions, and was administered to thirty-nine high school students.

College Survey

The Philosophy Interest Survey for college students contains twenty-nine questions as listed in Appendix A. The questions are further broken into three parts: Part A, General Questions; Part B, Philosophy Interest Questions; and, Part C, Multiple Choice Questions.

The survey was administered to twenty-six college undergraduates. The students were enrolled in three different undergraduate philosophy courses involving two different college instructors.

Demographic Data

Table 1 contains the results of the questions in Part A. The seven general information questions are used to establish a

Table 1

Frequency and Percentage of Responses by Students
To College Survey, Part A

Item	Frequency	Percent
Age:		
40-50	2	8
30-39	6	23
26-29	3	12
22-25	5	19
18-21	10	38
Sex:		
Male	16	62
Female	10	38
Grade Point Average (GPA):		
3.5-4.0	4	15
3.0-3.4	15	58
2.5-2.9	7	27
Number of Previous Philosophy Classes:		
4-6	4	15
1-3	7	27
0	15	58
Academic Interest in Philosophy:		
Major	3	12
Minor	2	8
Elective	21	80
Occupational Interest in Philosophy:		
Teach College	0	0
Teach High School	0	0
Personal Use	13	50
Other	13	50

demographic base. The largest single group (38 percent) of respondents fell in the class interval of 18-21 years of age. Overall, 69 percent of the respondents are below the age of 30. The group is composed of 62 percent male respondents and reflects that 58 percent of the respondents have a cumulative Grade Point Average between 3.0 and 3.4.

The next three areas establish the depth of interest and previous experience in philosophy on the part of respondents. The results show that for 58 percent of the respondents this was their first course in Philosophy. The next item establishes that 80 percent of the respondents are not pursuing philosophy academically. The final item shows that none of the respondents indicate any intention to pursue a teaching career in philosophy. No motivation is clear-cut, and only 50 percent indicate they are taking philosphy for their personal use.

The 'typical' respondent is a male, undergraduate student in his early-to-mid twenties, has maintained a said "B" Grade Point Average, and is pursuing his first course in philosophy. He has made no academic commitment to this area of study, and is as likely to be taking the course for personal use as for other, undetermined, reasons. However, he is probably not intending to teach philosophy.

Philosophy Interest Questions

Table 2 contains the results of Part B of the Survey. Part B

contains eighteen interest survey questions which are to be answered on a Likert-type five degree scale. However, because of a tendency for responses to cluster into one or two of the scales, the answers are collapsed into Agree/Disagree responses. Throughout the discussions that follow about Table 2 results, all percentages are based on calculations of only those expressing an opinion, unless otherwise stated.

The results of Questions 3, 7, and 16 provide the basis for an analysis of General Investigative Question 1 in Chapter 1: Do respondents who are introduced to philosophy react favorably to that introduction?

Question 3 is fundamental to the survey. It asks directly whether or not an undergraduate college student enjoys philosophy after completing at least one semester of study. The results show that 92 percent agree that they did enjoy their course in philosophy.

Question 7 asks for a commitment on the part of the student towards philosophy. The results show that only 38 percent of those responding indicate that they will take another course in philosophy.

The respondents were asked in Question 16 to indicate the attitude they developed towards philosophy after a full semester; 86 percent agree that their attitude towards philosophy has improved since they took the course. Question 16 was also designed to determine internal consistency by comparing the results of this question to

Table 2

Frequency and Percentage of Responses by Students
To College Survey, Part B

QUESTION[a]	AGREE		DISAGREE		NO OPINION
	FREQUENCY	PERCENT[b]	FREQUENCY	PERCENT[b]	FREQUENCY
1	17	77	5	23	4
2	12	86	2	14	12
3	23	92	2	8	1
4	18	78	5	22	3
5	14	64	8	36	4
6	18	86	3	14	5
7	9	38	15	62	2
8	14	74	5	26	7
9	10	83	2	17	14
10	6	35	11	65	9
11	11	50	11	50	4
12	5	22	18	78	3
13	6	27	16	73	4
14	18	82	4	18	4
15	7	37	12	63	7
16	18	86	3	14	5
17	18	69	8	31	0
18	12	60	8	40	6

[a]See Appendix A for statement of the questions.

[b]Percentages for Agree/Disagree are determined after removal of No Opinion responses.

those of Question 3. The results are comparable with the slight difference being attributed to a number of students having received previous courses in philosophy, and may have already had a positive attitude towards philosophy.

The results for these three questions indicate that college students who are introduced to philosophy react very favorably to that introduction. They are not overwhelmingly committed to take further courses in philosophy, yet their opinion of philosophy improved following their semester of philosophical study.

Questions 2, 5, 8, 11, 12, 13, and 18 provide the basis for an analysis of General Investigative Question 2: Do respondents indicate a motivation for taking courses in philosophy? An additional three questions (9, 10, and 15) are also related to this Investigative Question.

Question 2 moves from the previous generalized question to one of specific choice: Would the respondent have selected this particular philosophy course for this semester? The results show that 46 percent of the respondents did not have a strong enough commitment to express an opinion. Of those expressing an opinion, 86 percent of the respondents agree that they would have selected this course.

In Question 5, the survey turns to the question of motivation within the group. The results show that 64 percent agree that their strongest motivation for taking this course was for the credit.

Although this would indicate mild pedagogical motivation, it would not be too surprising. Knowles (1970) pointed out that adults who have been treated like children in the classroom for most of their lives will not likely become pure adult learners immediately.

Question 8 combines interest in philosophy with a self-directed, adult motivation. The results show that 74 percent of those expressing an opinion agree that philosophy helps them to be better prepared for life. However, a noticeable 27 percent had No Opinion.

Question 11 continues to probe the area of mutual philosophical interest and adult motivation. The respondents were equally divided between agreement and disagreement on whether they would like to take more classes in philosophy to be better able to derive their own personal philosophy.

The results of Question 12 show that 78 percent of the respondents did not believe that receiving course credit was the determining factor in electing to continue to take courses in philosophy.

For Question 13, 73 percent of the respondents disagreed that they could not see how philosophy would make them successful. This is another question, negatively stated, asking the students to respond to an interest in philosophy in terms of motivation.

The results of Question 18 show that 60 percent agree that they would take more philosophy courses if they saw how philosophy applied to getting jobs.

Question 9 is intended to continue the joint interest between philosophy and motivation. While 83 percent of those responding indicate they agree they would like to see open philosophical discussions on campus, the fact that 54 percent of all respondents indicate No Opinion, tends to demonstrate that this question is not a reliable indicator.

In Question 10, 65 percent of the respondents disagreed that philosophers waste too much time talking about abstract questions. This question is intended to draw out philosophy interest by presenting the respondent with a criticism that is often levelled against philosophers.

Question 15 asks the respondent to make a commitment to join a group dedicated to philosophy. It also brought in the aspect of current issues. The results shows that 63 percent of the respondents disagree and would not make the commitment requested.

The results of the last 10 questions indicate that there is no clear motivation for students to take further courses in philosophy. In response to General Investigative Question 2, students are as likely to be motivated by external motivation as by self-directed, adult motivation.

Another important question for this study is shown in the results to Question 4. After completing a full semester in philosophy, would the respondents feel that it would have been advantageous

to have been introduced to philosophy in high school. The results in Table 2 show that 78 percent agree that such an early introduction would have been good.

These results support an affirmative response to General Investigative Question 3: Do students who are introduced to philosophy favor introducing some form of philosophical inquiry prior to the college or university?

The next question provides a partial basis for analysis of General Investigative Question 4 in Chapter 1: Which course(s) do respondents feel would be best suited to introduce to pre-university students.

Respondents had a chance to indicate whether or not they wished they had received an introduction to philosophy in high school in Question 4. They are now asked if two specific courses in philosophy should be introduced into the high school. Question 14 shows that 82 percent agree that Logic and Ethics should be introduced into the high school. One reason for including this question was to determine if there is internal consistency in the survey. It should be noted that the same number of respondents agreed to Question 4 and 14. Question 4, Part C, below will provide additional basis for analyzing Investigative Question 4. Several additional questions were asked for various reasons, as indicated.

For Question 17, 69 percent of the respondents agree that, when they were in high school, they had no idea what philosophy was about.

This question was intended to establish whether the students felt they had previously received some introduction to philosophy.

Regarding Question 1, 77 percent of the respondents agree that students should have a lot to say about which courses are offered each semester. This question is used to differentiate between pedagogical and andragogical thinking among the respondents. The question is influenced by Malcolm Knowles' (1970) implications for the technology of andragogy. Not shown in the table, but of interest, is that 55 percent of the respondents indicated they Strongly Agree. This is mentioned because it is the highest frequency in the Strongly Agree category among the survey results. This would indicate some andragogical tendencies within the group.

The responses to Question 6 indicate that most (86 percent) of the students believe that schools are responsive to student needs. The purpose of this question was to determine if a respondent might not generalize a negative attitude towards school in answering the survey. The three students who disagreed with the question represents 12 percent of the group, and they accounted for 16 percent of all Disagree responses. Therefore, these respondents did not bias the results by responding with a disproportionate number of Disagree responses throughout the survey.

Table 3 contains the results of the questions in Part C. This section contains four multiple-choice questions also related to the

Table 3

Frequency and Percentage of Responses by Students To College Survey, Part C

Question[a]	Possible Responses	Frequency[b]	Percent
1	Too Abstract	10	38
	Too Outdated	4	16
	Too Much Memorizing	6	23
	No Opinion	6	23
2	Stimulating	9.5	40
	Insight	7	29
	Great Thinkers	5.5	23
	Other	2	8
3	Grade School	1	4
	Junior High	4	15
	High School	15	58
	College	6	23
4	Logic	4.5	17
	Ethics	2	8
	History of Philosophy	11.5	45
	Contemporary Issues	4	15
	Other	4	15

[a]See Appendix A for statement of the questions.

[b]Not all students responded. Other students split their response and their scores were converted to fractions.

interest in philosophy.

Question 1 asks students to identify which aspect of philosophy they liked the least. The largest response (38 percent) was that philosophy was "Too Abstract." For the most part, responses are evenly divided between the possible choices.

Question 2 gives the students a chance to identify which aspect of philosphy they liked the best. The response shows that 40 percent chose "Stimulating" as the adjective which described the best thing about philosophy. An interesting phenomenon occurred on this question as four students split their responses to indicate a wide-spread acceptance of philosophy.

The college students were given a chance to draw on their experiences and, using hindsight, indicate at what point in the school system did they think some introduction to philosophy should begin. The response to Question 3 shows that over 75 percent chose an introduction prior to college--of which 58 percent selected the high school as the starting point. The response to this question reaffirms that students do favor an introduction to philosophy as previously established by Part B of the Survey.

What is the best class to introduce high school students to philosophy? The respondents to Question 4 chose a History of Philosophy class most frequently (45 percent). This response is probably more accurate than Question 14 in Part B above in

determining an answer for General Investigative Question 4. A History of philosophy class is the most frequent choice of college students.

The results of the college survey indicate there is a very favorable response by students who are introduced to philosophy. The results also show that college students wish they had been introduced to philosophy in high school. The overall response of college students indicates support for an effort to introduce philosophy to pre-university students.

High School Survey

The Philosophy Interest Survey for college students was revised and reduced for the high school students. Re-wording of some questions was necessary to fit the situation. The revised survey contains seventeen questions as listed in Appendix B.

The survey was administered to thirty-nine high school students. The students were enrolled in two classes of an English course in Greek Mythology. The first class consisted of twenty-six students who received three days of introduction to philosophy (Group A), and the second class consisted of thirteen students who received no introduction to philosophy (Group B). On the third day, the survey was administered to both groups.

Demographic Data

The five general questions in Part A are used to establish a

demographic base. The results are listed in Table 4. The largest single group of respondents were age eighteen for both groups. Group A is composed of a majority of females (65 percent), while Group B is slightly dominated by males (54 percent). While both groups showed 54 percent with a "B" average (GPA), Group B had a higher percentage of "A" students (23 percent) than Group A (4 percent). The difference between the two groups becomes more pronounced on the results to the question on intention to attend college: Group A, 62 percent; and Group B, 92 percent. The final question in Part A asked students to indicate their extracurricular activities. Results show that Group A listed a total of 31 school-related activities to 15 activities for Group B. Again, for non-school related activities, Group A had twice as many activities as Group B (i.e., 38 to 19). As Group A is comprised of exactly twice the number of respondents as Group B, there is no difference between the groups in the number of extracurricular (school or non-school) activities in which they participate. The greatest difference occurs in the type of activities participated in by the groups. Group A showed a greater tendency for Sports (42 percent) than Academics (24 percent). Group B was more inclined towards Academice (37 percent) than Sports (26 percent).

Philosophy Interest Questions

Table 5 contains the results of Part B of the Survey. Part B

Table 4

Frequency and Percentage of Responses by Students With (Group A) and Without (Group B) an Introduction to Philosophy For High School Survey, Part A

Item	Group A		Group B	
	Frequency	Percent	Frequency	Percent
Age:				
17	4	15	1	8
18	22	85	11	84
19	0	0	1	8
Sex:				
Male	9	35	7	54
Female	17	65	6	46
Grade Point Average (GPA):				
A	1	4	3	23
B	14	54	7	54
C	11	42	3	23
College Intention:				
Yes	16	62	12	92
No	10	38	1	8
Extracurricular Activities:				
Number in School:				
0	8	31	5	38
1	10	38	2	16
2	5	19	5	38
3	1	4	1	8
4	2	8	0	0
Number Outside School:				
0	7	27	5	38
1	8	31	1	8
2	5	19	5	38
3	4	15	1	8
4	2	8	1	8
Type:				
Sports	16	42	5	26
Academs	9	24	7	37
Hobbies	13	34	7	37

Table 5

Frequency and Percentage of Responses by Students With (Group A) And Without (Group B) an Introduction To Philosophy For High School Survey, Part B

	Group A					Group B				
	Agree		Disagree		N/O[a]	Agree		Disagree		N/O[a]
Item[b]	No.	%	No.	%	No.	No.	%	No.	%	No.
1	19	90	2	10	5	N/A[c]	N/A[c]	N/A[c]	N/A[c]	0
2	11	79	3	21	12	9	90	1	10	3
3	21	95	1	5	4	11	100	0	0	2
4	12	67	6	33	8	9	82	2	18	2
5	11	46	13	54	2	N/A[c]	N/A[c]	N/A[c]	N/A[c]	0
6	15	68	7	32	4	12	100	0	0	1
7	6	60	4	40	6	6	55	5	45	1
8	8	62	5	38	3	9	75	3	23	0

[a] N/O is used for No Opinion responses.

[b] See Appendix B for statement of the question.

[c] N/A is used when the question did not apply to the control group.

contains eight interest survey questions which are to be answered on a Likert-type five degree scale. However, answers were collapsed to Agree/Disagree responses. Throughout the discussions that follow about Table 6 results, all percentages are based on calculations of only those expressing an opinion, unless otherwise stated.

The results to Question 1 and 7, Part B, provide the basis for an analysis of General Investigative Question 1 in Chapter 1: Do respondents who are introduced to philosophy react favorably to that introduction?

Question 1 applies to Group A only. It asks if the students enjoyed their introduction to Philosophy. Respondents overwhelmingly agree (90 percent).

The importance of Question 7 is based on its asking for a commitment. Specifically, would the respondents take a course in philosophy when they went to college? Only the responses of those actually indicating an intention to go to college in Part A of the survey were tabulated. For Group A, 60 percent of the respondents made such a commitment compared to 55 percent of Group B. Because of the small number of respondents in Group B, this difference is negligible. The results are both favorable and realistic when considering the uncertainty of college degree and course requirements at this time for the students.

The results for these two questions in Part B indicate that high

school students who are introduced to philosophy react very favorably to that introduction. The interest in philosophy displayed by students who did not receive an introduction is comparable to those who did receive the introduction when comparing the results of Question 7 on the intention of students to take courses in philosophy at college.

The next three questions provide the basis for an analysis of General Investigative Question 2: Do respondents indicate a motivation for taking courses in philosophy?

Question 4 matches the interest in philosophy with motivation. Would respondents be able to see where philosophy could help them to better cope with everyday problems in life? The results show that 67 percent of Group A and 82 percent of Group B agree with the question. Group B, who did not receive an introduction to philosophy before the survey was taken, showed a more positive response to this question.

In Question 6, the survey returns to matching interest in philosophy with motivation. In Group B, 100 percent of the respondents expressing an opinion agree that they would like to take some classes in philosophy to be better able to derive their own personal philosophy. In Group A, 68 percent of the respondents agree. These percentages are similar to the percentages between the two groups on the demographic item of intention to go to college.

The responses to Question 8 are also limited to those indicating an intention to go on to college. For Group A, 62 percent agree that

they would be more inclined to take courses in philosophy if they could see how it would affect their getting a job. This percentage is roughly equal to the same percentage who already indicated in Question 7 that they intend to take a course of philosophy in college. However, for Group B, 75 percent of the respondents agree to Question 5. This is a large increase from the 55 percent in Question 7 who indicated they intended to take a course of philosophy in college. That is, Group B appears to be more affected by the aspect of job motivation than Group A in determining their intention to take courses in philosophy. This would be partially explained by the variable of introducing philosophy to Group A before the survey was completed.

The results of the last three questions indicate that there is no clear motivation for students to take further courses in philosophy. In response to General Investigative Question 2, students are as likely to be externally motivated as by self-directed, adult motivation.

Question 2 asks students to express whether or not they wish they could have had an introduction to philosophy earlier in high school. Both groups indicate high agreement. In Group A, 79 percent of the respondents agree; while in Group B, 90 percent of the respondents agree.

In Question 3, there is overwhelming agreement (95 and 100 percent) by both Groups A and B, respectively, that philosophy can be

successfully introduced into the high school.

The results of Questions 2 and 3 support an affirmative response to Investigative Question 3: Do students who are introduced to philosophy favor the introduction of some form of philosophical inquiry prior to the college or university?

Only Group A responded to Question 5. The results were nearly equally divided. A slight majority (54 percent) disagreed with the contention that they did not have any idea what Philosophy was about until their three day orientation.

Table 6 contains the results of Part C of the Survey. Part C contains four multiple-choice questions. Question 1 asks the students to identify the aspect of philosophy they least liked. Both groups selected the response, "Too Abstract," with the most frequency. The least frequent response by both groups was the selection "Too Outdated." The introduction to philosophy did seem to have some effect on Group A. A larger percentage (28 percent) chose the response, "No Problem," than in Group B (18 percent).

Question 2, Part C, gives the students a chance to select the aspect of philosophy they liked best. Over 50 percent of Group A chose the response, "Learn Ideas," while nearly 50 percent of Group B selected the response, "Insight Into Myself." One possible explanation of the differences is that the introduction to philosophy that Group A received was oriented towards a number of new ideas among the

Table 6

Percentages of Responses by Students With (Group A) and Without (Group B) an Introduction to Philosophy For High School Survey, Part C

Item[a]	Possible Responses	Percent	
		Group A	Group B
1	Too Abstract	44	64
	Too Outdated	8	0
	Too Much Memorizing	20	18
	No Problem	28	18
2	Stimulating	9	15
	Useful	5	8
	Insight Into Myself	33	46
	Learn Ideas	53	31
3	Grade School	0	8
	Junior High	12	15
	High School	88	77
	College	0	0
4	Logic	27	46
	History of Philosophy	43	31
	Ethics	5	0
	Contemporary Issues	21	23
	Other	4	0

[a]See Appendix B for statement of questions.

Greeks.

For Question 3, students are asked to express their opinion as to when philosophy can be successfully introduced into the educational system. Both groups agree unanimously that philosophy can be successfully introduced before college. There is mutual agreement, also, that this introduction should begin in the high school. The response to this question reaffirms that students do favor the introduction of philosophy prior to college.

Question 4 takes on more meaning in view of the overwhelming agreement among the respondents to Question 3, Table 8. Since they agree that philosophy should be introduced in the high school, what would be the best class to start? The most frequent response (43 percent) for Group A was History of Philosophy. The frequency of response by Group B to History of Philosophy is only 31 percent; however, Group B's most frequent response (46 percent) is Logic. Only 27 percent of Group A selected Logic. While there is no significant difference to the other responses, Groups A and B have reversed their emphasis between Logic and History of Philosophy.

The results of the high school survey indicate there is a very favorable response by students who are introduced to philosophy. The results also show that high school students wish they had been introduced to philosophy earlier in high school. The overall response of high school students indicates support for an effort to

introduce philosophy to pre-university students.

College-High School Comparison

Most of the questions used on the high school survey were taken from the original college survey. A comparison is made in Tables 7 and 8, using the questions from Table 5 (High School Survey) between the twenty-six college students (Group D in Table 7) and the twenty-six high school students who received an introduction to philosophy (Group H).

The results for Question 1, Table 7, clearly demonstrate high school and college students, who receive an introduction to philosophy, have an overwhelmingly positive reception and attitude towards philosophy. Applying Yates Adjusted Chi Square, the value calculated is well below the critical value at the .05 level of significance. The Null Hypotheses, that reception and attitude towards an introduction in philosophy is independent of college or high school students, is accepted.

Group C and Group H are equally in agreement (78 and 79 percent, respectively) that they would have liked to have been introduced to philosophy earlier in their academic studies; specifically, high school. The calculated Chi Square for Question 2 is again very low, reflecting no dependence between response and student status.

Question 4 is intended to determine the extent of adult-oriented

Table 7

Chi Square Test of Independence and Percentage Comparison
Of Responses Between College (Group C)
and High School (Group H) Students

	Percent[a]				
	Agree		Disagree		
Item[b]	Group C	Group H	Group C	Group H	Chi Square[c]
1	92	90	8	10	.117, Accept H_o
2	78	79	22	21	.680, Accept H_o
4	74	67	26	33	.218, Accept H_o
5	69	46	31	54	2.805, Accept H_o
6	50	68	50	32	1.504, Accept H_o
7	38	60	62	40	.680, Accept H_o
8	60	62	40	38	.008, Accept H_o

[a]Percentages for Agree/Disagree are determined after removal of No Opinion responses.

[b]See Appendix B for statement of the questions.

[c]The level of significance is .05; df = 1. Yates Adjusted Chi Square is used for Items 1, 2, and 7, due to expected frequencies of less than five.

motivation. Knowles points out that, as the adult matures, his self-concept moves toward one of becoming a self-directing human being. The results, as shown in Table 7, indicate that college students are more adult-oriented than high school students (74 percent versus 67 percent). This difference is not significant at the .05 level when applying Chi Square. Nor is the difference as great as might be expected when comparing the two levels of education.

Question 5 was originally designed as much for general information as for interest survey. As there is no philosophy currently being taught, per se, in the Great Falls High School system, it was expected that few students would disagree, but the amount remained in question. While 69 percent of the college students agree, 54 percent of the high school students disagree. The calculated Chi Square is not significant at the .05 level. This difference may be due to a number of variables that were not controlled: the number of years out of high school for college students, a defensive reaction to the question by high school students, some informal introduction to philosophy--either in or out of the high school system, etc.

In Question 6, another adult-oriented motivation is linked with philosophy. Knowles (1970) points out that the child regards experience as something that happens to him (i.e., externally

directed universe), while the adult regards his experience as part of him (i.e., self-directed universe). Group H agreed more frequently (68 percent) than did Group C (50 percent) that they would like to take some classes in philosophy to be better able to derive their own personal philosophy. The difference, however, is not significant at the .05 level when applying the Chi Square Test. Further, the difference can be linked to the results of Question 7: whether or not they even intended to take any more courses in philosophy. Once again, there is more agreement among high school students than college students (38 and 60 percent, respectively) that they intended to take another course in philosophy at college.

The Chi Square Test, when applied to Question 7 is not significant at the .05 level. A number of variables that were not controlled can explain the amount of difference that does exist; pending graduation for college students (either Associate or Baccalaureate Degrees), satisfaction by college students with the amount of philosophy they had received, etc.

The percentage of agreement between the groups on Question 8 is roughly equivalent. Approximately 60 percent of both groups agree that they would be more inclined to take classes in philosophy if they could see how it would help lead to employment later in life. There is no dependence between response and student status.

Table 8 covers a comparison between the two groups on three of the multiple-choice questions. Question 1 allows the respondents to select the aspect of philosophy they least liked. The most frequent response by both groups was that philosophy is "Too Abstract." The frequency of responses to the other choices is comparable between the groups.

Question 3 asks respondents to indicate when did they feel students should be first introduced to philosophy. The most frequent response by both groups was for an introduction in high school. However, 23 percent of the college students felt that the first introduction should wait until college, while none of the high school respondents agreed to this response.

When asked in Question 4 which course should be first introduced, nearly half the respondents in each group selects 'History of Philosophy.' Some students in each group split their votes to apparently indicate more widespread approval of philosophy. Respondents were also permitted to recommend their own introductory courses; 15 percent of the college students did so; only 4 percent of the high school students did so. This could be expected since the college students had a longer introdution to philosophy, and had both the knowledge and confidence to create alternatives.

The results of the college survev, the high school survey, and the comparison of the two groups indicate that there is no

Table 8

Percentage Comparison of Responses Between College (Group C) and High School (Group H) Students

Item[a]	Possible Responses	Percent	
		Group C	Group H
1	Too Abstract	38	44
	Too Outdated	16	8
	Too Much Memorizing	23	20
	No Problem	23	28
3	Grade School	4	0
	Junior High	15	12
	High School	58	88
	College	23	0
4	Logic	17	27
	History of Philosophy	45	43
	Ethics	8	5
	Contemporary Philosophy	15	21
	Other	15	4

[a]See Table 5 for statement of the questions.

dependency on student status for the respondents' overall positive reaction to and interest in philosophy. The level of interest among students in the current school system supports the introduction of some form of philosophical inquiry into the pre-university educational system.

Additional Comments

After the survey was completed, the high school students were advised that they could use a small space at the end of the survey, to add any additional comments regarding their three day "crash" course in philosophy, the general area of philosophy, or the survey. The following are representative samples of these comments:

> Your presentation was interesting. The part of your presentation I liked the best was the explanation of the ideas of the early philosophers. (18 year old, female, "B" Average, College-bound)

> Thank you for talking to us, and answering our questions. I have always wondered about what philosophy was, and you have answered some of my questions. (18 year old, male, "C" average, College-bound)

> To(o) bad you didn't have more time to explain what philosophy, itself, will do for us. Explain what it can help us in. (18 year old, male, "C" average, Trade School)

> I found this class very intriguing and realistic. (18 year old, male, "C" average, No college intentions)

> To(o) much history--More modern ideas needed. (17 year old, Female, "C" average, No college intentions)

The idea of Question to me is the most important thing that I got out of this course. (18 year old, male, "B" average, College-bound)

I really enjoyed the presentation. I though it was a very well put together talk. I think philosophy is good, because, it makes people think. In this day and age of machines, a lot of people just don't have to think. (17 year old, Male, "C" average, No college intentions)

Should have spent some time on Contemporary Issues--students could have better related better to things they know a little about. (18 year old, Female, "B+" average, College bound)

I believe that it would be a good idea to introduce philosophy to high school students. Because it would help us all understand each other through the process of questioning. But you can't change the way people think overnight. So maybe it should become a required course. Only Time will tell. (18 year old, male, "B" average, College bound)

Chapter 5

SUMMARY

The study was designed to determine the level of interest in philosophy generated among students who were given some introduction to philosophy. The primary motivation for the study is a belief that the introduction of philosophy into the educational system prior to college would promote the type of thinking that would lead to self-directed, adult learners who had the skills and motivation to learn throughout their lifetime.

A Philosophy Interest Survey was given to both college and high school students. The college group, and one group of high school students, received an introduction to philosophy prior to the survey. One group of high school students did not receive an introduction to philosophy prior to the survey.

Results show that a high percentage of all students who received an introduction to philosophy exhibited a positive response. The results were independent of student status.

No strong tendencies were shown by either group towards motivation in taking classes in philosophy. Although overall results were positive, no group indicated a clear-cut basis by which students can be motivated to take courses in philosophy. The results were independent of student status.

All groups indicated their firm belief that philosophy could be introduced successfully into the high school. The high school groups were more inclined, on a percentage basis, to accept this viewpoint. The overall results show that the difference was not significant enough to establish that response depends on student status.

Nearly half of the college and high school students chose History of Philosophy as the best course to introduce philosophy into the high school. The two groups were close in their other choices as well. The null hypothesis was accepted to indicate the lack of dependency on student status in choosing the type of philosophy course that would be best to introduce philosophy into the high school.

Conclusions

On the basis of the results of this study, both high school and college students seem to respond equally favorably to an introduction to philosophy. Even the students who had received no introduction reacted positively towards philosophy. The results indicate that there is a receptive audience awaiting to be introduced to philosophy at all levels of the educational system.

It would seem fair to ask why there isn't a better enrollment in philosophy in the colleges if there is such a receptive audience

available. The answer lies in the results of Investigative Question 2: Student Motivation Towards Taking Courses in Philosophy. There is no clear-cut motivation on the part of students. This is only natural in view of the lack of introduction to philosophy in the current educational system. Even the student who takes a course in philosophy may see little connection between philosophical inquiry and his personal world. Philosophy probably won't help him to get a job, accumulate wealth, or bring fame. Philosophical inquiry may not even help him in the rest of the educational system insofaras the current system is geared to content reception, memorization, and playback. There is little concern about becoming motivated to be a lifelong learner, or to meet the challenge of a changing world. The emphasis seems to be on getting a job--NOW!

Yet, some recent trends show more adults going back to school for their first, or a subsequent, higher education experience. Employers are encouraging employees to participate in off-duty education. If these trends are viewed collectively, they seem to be saying, "learning as a life-long experience is gaining recognition." But, this perception is neither obvious nor conclusive; it is piecemeal and emerging.

Recommendations

During the course of this study, a number of areas appeared to

clearly warrant further exploration. These areas form the basis for the following recommendations:

1. Further studies are needed to determine alternative characteristics of future society, alternative implications for society and education that follow from each characteristic identified, and alternative educational technologies to achieve desired goals. This study did not address, for example, the possible negative reaction by business, government, religion, and military to a future generation of self-directed and ever-inquiring Andragoids. Many traditional institutions in society can be expected to counter any such movement on the part of education.

2. This study has served as a pilot experiment. The results helped to validate the survey and provide sufficient bases for recommending additional studies in the area of introducing philosophy to pre-university students. Further research with sample groups that do not have the size and distribution limitations of the groups used in this study are encouraged.

3. More importantly, work must be done to introduce philosophical inquiry into the entire educational fabric. Course content, methods, and interdependency with other classes are a few of the areas of teaching philosophy or philosophical inquiry to students that need study. The question of how early in a child's life can you promote philosophical inquiry must be studied.

4. Longitudinal studies on groups who receive a philosophically oriented education could be conducted to determine the eventual impact on producing self-directed, adult learners. A variety of measurements will be needed to measure the impact of a philosophical background on adult learning. Yet, caution must be taken to resist a total dependency of measuring success on the amount of content memorized. Adult learning techniques can be only partially measured.

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APPENDICES

APPENDIX A

COLLEGE PHILOSOPHY INTEREST SURVEY

Instruction Sheet--Philosophy Interest Survey

Introduction: Include Name of Survey Administrator and School affiliation.

Anonymity: Advise respondents that they are not required to identify themselves on the survey.

Part A: General Information. Respondents should feel free to ask for clarification.

1. Age: Age nearest birthday.
2. Sex: Self-Explanatory (S-E).
3. Current Student Status: Choices a. & b. are S-E; choice c. refers to anyone taking this course for personal reasons but are not entered into a formal degree program.
4. Current Grade Point Average: S-E.

5., 6., & 7. are S-E.

Part B: Interest Questions.

This part has two sets of questions. Questions 1-18 should be answered by selecting the response that comes closest to your current attitude or interest. The following guide (use blackboard) should

be used to answer questions 1-18 only. This guide is also shown on the survey. (Use an example: I think Kennedy's assasination was the result of a Communist conspiracy. If you feel very strongly that this statement is False, select response "e", i.e., Strongly Disagree.)

Part C: The second part of Interest Questions includes Questions 19-22. Note that each of these last four questions has alternative responses provided. Choose from the responses provided and not the guide used for Questions 1-18. (Use an example: My favorite subject in high school was: a. English; b. History; c. Art; or d. Other _____. In this example, the respondent can choose from the responses provided or write in his own response.)

Part A. General Information. Mark the answer that applies to YOU.

1. Your Age (nearest Bi thday):
   __a. Under 18 __b. 18-21 __c. 22-25
   __d. 26-29 __e. 30-39 __f. 40-50

2. Your Sex:
   __a. Male __b. Female

3. Your Current Student Status:
   __a. College Undergrad
   __b. College Grad
   __c. Adult Learner

4. Your Current Grade Point Average (4.0 = A):
   __a. 3.5-4.0 __b. 3.0-3.4 __c. 2.5-2.9 __d. Below 2.5

5. Philosophy Background:
   __a. This is my first Philosophy course.
   __b. 1 to 3 previous philosophy courses.
   __c. Over 3 previous philosophy courses.

6. Academic Interest in Philosophy:
   __a. Philosophy Major __b. Philosophy Minor __c. Elective

7. Occupational Interest in Philosophy:
   __a. Philosophy Teacher - College;
   __b. Philosophy Teacher - High School;
   __c. Personal Use
   __d. Other

Part B. Interest Survey. Select the answer which comes closest to your current attitude or interest. The following guide should be used when selecting which letter you will use to answer Questions 1-18:

a. Strongly Agree b. Agree c. No Opinion d. Disagree
e. Strongly Disagree

__ 1. I think students should have a lot to say about which courses are offered each semester.

__ 2. If I had been asked ahead of time, I would have selected this course to be offered this semester.

__ 3. I enjoyed this course in Philosophy.

__ 4. I wish I had been introduced to Philosophy in High School.

__ 5. My strongest motivation for taking this course was for the credit.

__ 6. Most schools are responsive to student needs.

__ 7. I will probably take another course in Philosophy.

__ 8. This class has helped me to be better prepared for life.

__ 9. I would like to see some open philosophical discussions on campus similar to those held by the Greeks.

__ 10. Philosophers waste too much time talking about abstract questions instead of more current and concrete problems.

__ 11. I would like to take more classes in Philosophy to be better able to derive my own personal philosophy.

__ 12. I would be interested in taking more classes in Philosophy, but the credits wouldn't help me to graduate, so I won't.

__ 13. I don't see how Philosophy will make me successful.

__ 14. Students should be introduced to Logic and Ethics in High School

__ 15. I would be interested in joining a group that got together periodically to have "hot" discussions on current Philosophical issues.

__ 16. My attitude towards Philosophy has improved since I took this class in Philosophy.

__ 17. When I was in High School, I had no idea what Philosophy was about.

__ 18. I would take more Philosophy courses if I saw how they applied to jobs on the outside.

__ 19. The biggest problem with classes in Philosophy is: a. Too Abstract b. Too Outdated c. Too much Memorizing d. No Problem

__ 20. The best thing about Philosophy classes is: a. Stimulating b. Insight into Myself c. Great Thinkers

__ 21. I think some introduction to philosophical thinking should begin in: a. Grade School b. Junior High c. High School d. Colege.

__ 22. If philosophy was offered at the high school leve, the best class to start with would be: a. Logic b. History of Philosophy c. Ethics d. Contemporary Philosophy e. Other: _____

THANK YOU !!!

APPENDIX B

HIGH SCHOOL PHILOSOPHY INTEREST SURVEY

Instruction Sheet--High School Interest Survey

Introduction: Include Name of survey administrator and school of affiliation.

Anonymity: Advise respondants that they are not required to identify themselves on the survey.

Part A: General Information. Respondents should feel free to ask for clarification.

1. Age: Age nearest birthday.
2. Sex: Self-Explanatory (S-E).
3. Grade Average: S-E
4. College Intent: Answer Yes if you intend to go to College after completion of high school; Answer "no" if you do not intend to go to College after high school.
5. Extracurricular Activities: For "a." enter the number of extracurricular activities that you participate in that are related to your school. For "b.", enter the number of extracurricular activities that you participate in that are not related to your school. For "c.", put in the number of activities you just identified in "a" and "b"

into the type of activities they are.

Part B: Interest Questions.

This part has two sets of questions. Question 1-8 should be answered by selecting the response that comes closest to your current attitude or interest. The following uide (use blackboard) should be used to answer questions 1-8 only. This guide is also shown on the survey. (Use an example: I think John Kennedy's assasination was the result of a Communist conspiracy. If you feel very strongly that this statement is false, select response "e", i.e., Strongly Disagree).

Part C: The second part of Interest Questions includes Questions 9-12. Note that each of these last four questions has alternative responses provided. Choose fromthe responses provided and not the guide used for Questions 1-8. (Use an example: My favorite subject in high school was: a. English; b. History; c. Art; or d. Other _____. In this example, the respondent can choose from the responses provided or write in his own response.)

Part A. General Information. Mark the Answer that Best Applies to YOU.

1. AGE ____ 2. SEX ____ 3. GRADE AVERAGE _____

4. COLLEGE INTENT ____

5. EXTRACURRICULAR ACIIVITIES:
   a. How Many (In School) ___
   b. How Many (Outside School) ____
   c. What Type of Activities:
      Sports ____ Academics ____ Hobbies ____

Part B. Interest Survey. Select the answer which comes closest to your current attitude or interest. The following guide should be used when answering:

a. Strongly Agree b. Agree c. No Opinion d. Disagree
e. Strongly Disagree

__ 1. I enjoyed this introduction to Philosophy.

__ 2. I wish I had been introduced to Philosophy earlier in High School.

__ 3. Philosophy can be successfully introduced into the High School.

__ 4. I can see where Philosophy could help me better cope with everyday problems in life.

__ 5. Until this introduction, I had no idea what Philosophy was about.

__ 6. I would like to take some classes in Philosophy to be better able to derive my own personal Philosophy.

__ 7. I will probably take a course in Philosophy at College.

__ 8. I would be more inclined to take classes in Philosophy if I could see how it would help me get a job later on in life.

__ 9. The biggest problem with Philosophy is:
a. Too Abstract b. Too Outdated c. Too Much Memorizing

d. No Problem

__ 10. The best thing about Philosophy is:
a. Stimulating b. Useful c. Insight into Myself
d. Learn Ideas

__ 11. I think some introduction to Philosophy should begin in:
a. Grade School b. Junior High c. High School
d. College

__ 12. If Philosophy was offered at High School, the best class to start with would be:
a. Logic b. History of Philosophy c. Ethics
d. Contemporary Issues e. Other: _____

THANK YOU !!!