

# Research into How Students in A Correctional Facility Second Chance School in Greece View Science

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**Abstract**—This paper is a follow-up study looking into how inmates view science and was carried out from 20th to 24th November 2018, the first having been conducted in 2014. It was carried out on thirty inmates in the first and second year of a Second Chance School (SCS) at a penitentiary in Greece.

**Keywords**—adult education, prison education, scientific literacy, second chance school

## I. INTRODUCTION

There are a total of 7 SCSs in Greece, 6 of which operate in men’s and 1 in a women’s prison. Lessons take place in the mornings and provide secondary level education. After two years of study a certificate is awarded equivalent to that of a regular Secondary School in Greece.

Relevant studies show that such schools are effective in lowering delinquency levels (1). Linton (2) stated that 60% of those who had been incarcerated ended up back in prison whereas other studies indicate that the rates of reoffending for inmates educated in the USA range from 15%-30% (3). According to Chappel the more educated the inmates the lower the level of reoffending.

Penitentiary must be an environment which inmates can have positive changes, to be able to learn new knowledge and to gain new skills . In this way they will be helped to reintegrate into society (4). Schools in prison help inmates not only with education but also to take advantage of their free time.

Education is a right for everyone and therefore for the prisoners (5). The Charter of Fundamental Rights of the European Union (Article 14) mentions that every human being has the right to education, also the Council of Europe (Article 28) states that prisoners must have access to education in every penitentiary in the EU.

## II. RESEARCH METHODOLOGY

Thirty adult male inmates in the first and second year of a Second Chance School (SCS) at a penitentiary in Greece, were the subject of the follow-up research which was carried out from 20th to 24th November 2018. The students were from 21 to 50 years old, from different countries in Europe, Africa and Asia.

For our follow-up research we used the Attitudes Toward Science Scale (ATS) of Francis & Greer (7). ATS has 20 statements based on a 4-point Likert scale (strongly disagree=1 - disagree = 2 - agree=3 - strongly agree = 4). The

number 18 statement was excluded in our questionnaire because was not appropriate for our students, this statement says "I'd seriously consider becoming a scientist when I finish school". In the statements 5 and 17 "Science is very important to the future of the United States" and "the United States needs to have many more scientists" the word USA was excluded from them and become "Science is very important to the future of a country" and "Every country needs to have many more scientists". The ATS questionnaire we used had 19 statements in total (Table 1).

## III. RESULTS AND DISCUSSION

The ages of the 30 students which took part in the follow-up research were as follow:

- 8 students are aged 21-25 years old,
- 12 students are aged 26-30 years old,
- 7 students are from 31-35 years old,
- 2 are from 36-40 years old, while
- 1 person is 50 years old.

In the 1st year was 16 students and 14 in the 2nd year of secondary school.

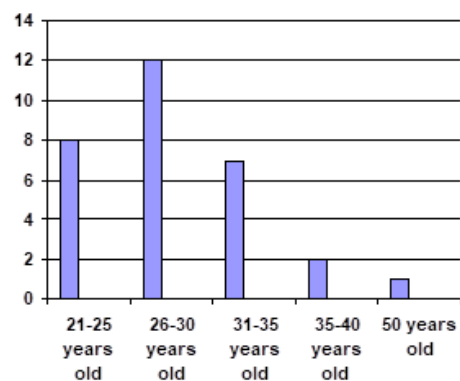


Fig. 1. Ages of the students.

The next table shows the 19 statements of the Attitudes Towards Science (ATS) (7) questionnaire and the results of our survey.

**TABLE I. ATS QUESTIONNAIRE**

1	<b>Science has ruined the environment</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	2	5	9	14
2	<b>Science that is taught in school is fun and interesting</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	0	18	12
3	<b>Science is relevant to everyday life</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	0	10	20
4	<b>Working in a science lab would be an interesting job for me</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	6	22	2	0
5	<b>Science is very important to the future of a country</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	0	16	14
6	<b>Science is difficult subject for me to learn</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	1	1	10	18
7	<b>Money spent on science is well worth spending</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	10	6	2	12
8	<b>I'd like to understand more about scientific explanation for things</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	16	12	2	0
9	<b>In the future, I'd like to use the science I am learning in school</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	0	19	11
10	<b>Studying science in school is something that I love to do</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	4	10	16
11	<b>Science will help to make the world a better place in the future</b>			

	strongly disagreed	disagreed	agreed	strongly agreed
	2	6	10	12
12	<b>I very much look forward to science lessons and activities in school</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	2	8	20
13	<b>Science discoveries do more harm than good</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	14	10	5	1
14	<b>I don't have much interest in science</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	9	16	4	1
15	<b>Science and technology are the cause of many of the world's problems</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	1	14	15
16	<b>Science is a school subject that I enjoy</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	1	15	14
17	<b>Every country needs to have many more scientists</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	1	14	15
18	<b>I would like to study science more deeply than I do now</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	2	26	2
19	<b>Science is difficult for me when it involves doing math</b>			
	strongly disagreed	disagreed	agreed	strongly agreed
	0	1	10	19

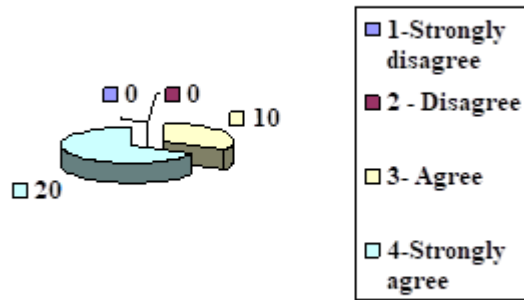


Fig. 2. Science is relevant to everyday life.

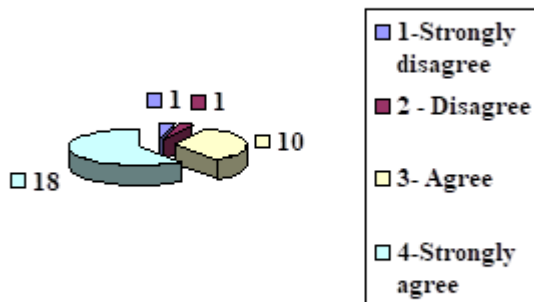


Fig. 3. Science is a difficult subject to learn.

#### IV. CONCLUSION

As we can see from the answers the students gave to statement 2, they find science taught in school enjoyable. Similar results show in other surveys in different countries, 78% of students in England, 93% in Iran, 92% in Singapore, 90% in Thailand, 89% in Kuwait show that students like science (8).

All the students in our study agreed with the statement 3 that science is relevant to everyday life. In two different researches in 1994 and in 2011 which they conducted in the UK (10), (12) show that 87% and 82% respectively, of the students agreed with that statement. Another survey in 1995 in Japan (11) show similar results.

A high percentage of students in our survey agreed that employment in a science lab would be an interesting job. Similar results show in a research in the UK in 2011 (12) which 68% of the students agreed with this statement.

Most of the students agreed with the statement 6, that science is a difficult subject to learn. Similar results show in a research in the UK in 2019 (13).

Nearly all the students in our research agreed with the statement 7, that the money spent on science is worth it. A research conducted in the UK show that 76% of the students agreed with this statement (12).

As for the statement 13, that the discoveries of science do more harm than good, nearly all the other researches show that students disagree with that. More specific a survey which conducted in the UK (12) show that more than half of the students disagree with the statement and a similar survey in Japan (14) show that 64% of the students believe that discoveries of science do more good than harm. In our research the results are different to the above surveys. Our questionnaire show that most of the students who took part in our research believe that the discoveries of science do more harm than good.

The results of this survey are very similar to those of the first survey which took place in 2014.

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