Business is detrimental to science essay



Over the past 20 years, commercial influences on scientific research have become increasingly detrimental. Discuss. Introduction: The business world has showed increasing interest in expanding their cooperation with scientific research centers during the last two decades. However, the impact of the alliance between business and science has hardly been positive. For the most part, commercial pressure has had such a negative impact on scientific research that few academics have been able to retain their independence (Langley, 2009).

This essay will analyze both scientific research areas and research results that have been harmed by business due to the lack of independence from business, using some examples to demonstrate it. Limited negative impact Over the past 20 years, the academic landscape has been altered in a drive for profit. The rapid spread of partnerships between businesses and universities has led to some disciplines becoming so intertwined with industry that very little scientific research has been able to keep independent (Langley, 2009).

Admittedly, the industry del which combined the computer science and software science with business is basically a success. The alliance benefits the whole society, while the research is not harmed by business. However, this seems to be the only positive case in the cooperation between science and commerce, and since computers and software are relative young compared to other science and industry, its long-term influence can hardly be decided yet. In most cases, commercial pressure has damaging influences on scientific research. Restricted research area

Firstly, commercial bias is evident in terms of which areas of scientific research are selected for funding, which restricts the research of non-instrumental in the public interest. Instrumental or 'applied' research is intended to be immediately useful, often for economic or financial interests, consequently, there is enough funding for scientists to undertake it.

However, since non-instrumental research which forms a crucial foundation for instrumental research has no direct business profit, there is less motivation for undertaking it.

Likewise, the business world has little interest in long-term profit research areas, let alone non-profit research areas, which results in scientific research performed in the public interest not receiving adequate support. For example, many funds were allocated for research on biotechnology in agriculture and medicine, while research on the possible dangers of genetic engineering was clearly neglected. Similarly, as Langley put, "environmental and social problems and 'blue-sky research commonly lose out to short-term commercial gain" (Langley, 2009). Restricted research time

Aside from being restricted in research area, science has also lost enough time to carry out research, which may lead to a mistaken result or biased result. Usually, medical investors are biased towards immediate economic gains because venture capitalists normally have a time horizon of about three years for a particular investment. However, three years is much less than the average time most companies take to get a new drug on the market. Furthermore, the period taken to confirm the safety and effectiveness of a newly developed drug is lengthy, which does to sit easily with much commercial planning (Slaughter, 2006).

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To fill the time gap, some drugs have been produced without adequate trial, which has been detrimental to the public. For instance, since there was not enough research of its toxicity before mass usage and long before it was banned, PPTP had been a significant ingredient of cold medicine. In brief, commercial pressure makes scientific research lack the time necessary for the process of trial and error. Covered research results Finally, science is losing its freedom to publicize their research results. This is the cost detrimental influence from commerce, because it betrays the trust of the public.

This problem, called 'sponsorship bias', has long been recognized in medical research, and is about the failure to report results unfavorable to the funded. For instance, Nancy Olivier had undertaken research involving a drug for treating the blood disease thalami's. When the evidence emerged that the drug had a high level of toxicity, it was concealed by the research funded, which is the producer of the drug, since the publication of the results might have been detrimental to the interests of the producer (Olivier, 2001).

Obviously, long before Olivier spoke out about the facts, the patients who had been prescribed this drug, had been exposed to a high risk.

Furthermore, with the accumulation of these scandals, the public has lost confidence in science. In conclusion, 'sponsorship bias' has undermined the quality and reliability of all scientific research. Conclusion: During the last two decades, scientific research has been restricted by the relationship with economic interests.

Scientists have lost the freedom to choose their own research area and do not have enough time to carry out scientific research, meanwhile, some scientific results do not even have chance to be publicized. Although there is some positive cooperation between business and computer science, in most cases, commercial influences on scientific research have become more detrimental than 20 years ago. Simply stated, if public and government continue to be indifferent to the harmful influence from business, scientific research will lose all its independence.