

LAMBERT REVIEW OF BUSINESS-UNIVERSITY COLLABORATION

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For healthy business-university collaboration, the different purposes of the two partners need to be recognised and respected. At present there is a real danger of corruption of the integrity of university research. The Government should give its support to protocols respecting the public interest in reliable knowledge derived from free and open publication of the results of university scholarship and research.

Bath: a Technological University

Like many universities founded in the 1960s, the University of Bath is required by its charter to work in close association with industry and commerce. It has, I would judge, faithfully followed that requirement over the past three decades. In the Materials Science department collaboration has been particularly close. Most undergraduates have included a year's industrial training in their courses and the vast majority of research over the years has been in association with industry. The value of this collaboration to industry is indicated by the large number of instances where an industrial sponsor continues to support a succession of projects over many years.

Contrasting missions of industry and universities

Thus, like the vast majority of my colleagues, I recognise that collaboration with industry and commerce is a "good thing", nevertheless dominant theme of this Evidence is one which expresses *note of warning*. It is essential to recognise that a university and a business corporation are two very different types of institution: they differ in their respective goals, motivations and methods and standards of excellence[1]. Grossly to simplify, on one hand research and scholarship in a university demand meticulous respect for evidence, candid admission of mistake or error and openness to public scrutiny of one's peers, on the other the prime responsibility of an industrial corporation is to make a profit. Unless these differences are recognised and respected, the stronger side in a partnership will subvert the values and purposes of the other.

Universities' service to the public good

Some commentators speak as if the concept of a university expressed in the last paragraph was anachronistic, appropriate only to some "ivory tower" age in the distant past. Against this view, the recent Dearing Report was insistent that alongside "serving the needs of a knowledge-based economy" the purposes of higher education included less instrumental, yet vital, aims of enabling individuals to develop their capabilities to the highest potential, *increasing knowledge and understanding for their own sake* and playing a major role in shaping a democratic, civilised, inclusive society [2]. Reliable knowledge, such as that derived from university research and scholarship, with its meticulous respect for evidence etc. is essential to society *"for a variety of public purposes, such as political discourse, legal disputation, and consumer protection"* [3]. Unless arrangements governing industry-university collaboration safeguard the intellectual integrity of

university research, the first-listed of the Dearing aims will be pursued to the detriment of the others. The long term consequence is that the first will fail as well.

Corruption of research integrity

Unfortunately the increased emphasis, in recent years, on the importance of industry-university collaboration, without a corresponding attention being given to the protocols which should direct it, have led to well-documented examples of what can only be termed corruption of research integrity. Many of these result from confidentiality clauses in research contracts which allow the sponsor to control, indeed to veto, publication. These arise in research council collaborative projects, as well as in research fully-funded by an industrial partner. Derek Bok, former President of Harvard, expressed the problem for hard-up universities thus [4]:

*"Universities are constantly pressed to **accept questionable arrangements** with industry, [which may include] provisions **prohibiting** academic scientists funded by one company **from collaborating with investigators funded by another.....A few institutions have even agreed to clauses that require them to keep faculty members from speaking about their commercially funded research at academic meetings** without first submitting their remarks to their industry sponsors."*

Many examples of the problems which arise are now well-documented. Some examples can be found in recent issues of *Science and Engineering Ethics*, especially those references as 5 and 6 below. The latter includes details of the now-classic case of Nancy Olivieri who defied her sponsor's threats of legal action, and warned her patients about adverse effects of the drug treatment they were undergoing [7, 8].

The conflict between the openness of science and the profit motive of business is now so serious that the editors of leading medical journals have recently found it necessary to require authors of papers submitted to affirm "*I had full access to all of the data in this study and I take complete responsibility for the integrity of the data and the accuracy of the data analysis*"[9]. Further concern about "*distortion of research outcomes, by distortion or omission of data that do not fit expected results, dishonest misinterpretation of results and publication of data known or believed to be false or misleading*" is clear from interim documentation of the English university funding council's (HEFCE) current project "Active Risk Management in Higher Education"[10].

Protocols to govern business-university collaboration

It is to be hoped that the *Lambert Review of Business-University Collaboration* will recognise the seriousness of the situation which has developed, and will make recommendations to address it so that business-university collaboration may be conducted under protocols which recognise and protect the legitimate interests of both sides.

If these problems are faced, it should be possible to construct a framework for co-operation which maximised the mutual benefit and limited the potential for damage-associated with collaboration between universities and industry. Drawing on the experience of Yale, Harvard and other institutions, such a framework might include such features as [11-16]:

- the university not accepting restriction, inhibition or infringement on academics' free inquiry or capacity orally to communicate results of research;

- no restriction on written publication save the most minor delay to allow for patenting;
- the university only agreeing to arrangements for sponsored research from a sector of society which is compatible with its norms and mission;
- the university not agreeing to any arrangement which will impair the environment of openness and free communication of ideas;
- all authors of publications acknowledge all funding sources and any direct business associations e.g. employment by a corporation that has financial interests in the work being reported;
- academic staff report to their university all commitments to organisations with which they are involved in professional work.

John Wakeford, head of the Missenden Centre, a private institution concerned with the development of higher education, recently expounded the Missenden code [17] (reproduced in the Appendix below) to promote ethical research in British universities, at a seminar held at the House of Commons on 11th November 2002. The code urges universities to set up ethics committees to vet donations, sponsorship and funding, and to ensure that the source of money is acknowledged in publications. It makes a particularly useful suggestion on the vexed question of limitation on freedom to publish results. It insists that "commercial considerations should never be allowed to prevent the publication of findings that are in the public interest or which add significantly to the body of knowledge in a field". Further in cases where some limitation on the freedom to publish is accepted, an explanatory note to this effect should be attached to the publication.

Conclusion

There is much to be said for research collaboration between universities and industry, but the balance of power needs to be altered. In recent years, much attention has been given to the question of the details of protocols and codes of conduct desirable to govern such liaison [18]. What is really needed, however, is firm commitment at government level to the principle of free publication. With this, government funding bodies, such as the research councils in the U.K., would follow suit, and universities would feel safe to adopt robust protocols, without facing a disastrous loss of research funds. It is hoped that the Lambert Review will recommend this.

April 2003

References

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Appendix

<http://www.missendencentre.co.uk/docs/MissCode.pdf>

27.11.02

The Missenden Code of Practice for Ethics and Accountability

1. All universities should have an institutional Ethics and Accountability Panel or Committee
2. Staff, students and the local community should have representation on the Committee
3. The Committee should take advice from those with a professional expertise in ethics
4. The Committee should vet all substantial donations, sponsorship and funding that the University applies for or is offered
5. The Committee should *inter alia* ensure that all sources of funding for any research carried out in the University's name are acknowledged in all publications
6. Where the Committee accepts a case for limitation on the freedom to publish it should attach an explanatory note to this effect
7. The brief of the person within the University with responsibility for attracting external 'third mission' funding should have a strong ethical element

8. The University's policy on Intellectual Property Rights should be disseminated as widely as possible by case studies and be made an integral part of job induction and training programmes
9. Sponsored research should bear a full share of the institution's infrastructure costs
10. The right of academic staff to publish research findings should be the primary consideration of any contract between industry and academia. Commercial considerations should never be allowed to prevent the publication of findings that are in the public interest or which add significantly to the body of knowledge in a field
11. The University should retain the rights of staff to publish without hindrance except where a specific written provision has been made with the agreement of all parties – to include all research students, research assistants and assistant staff involved. This should be explicitly mentioned in all staff contracts
12. Those obtaining sponsorship for research should not be given undue favour in promotion decisions
13. Universities should declare details of all investments
14. Universities should consider the creation of a register of interests for all members of the university