Vrije Universiteit Brussel

SESSION 2A UNIVERSITY ENGAGEMENT WITH COMMUNITIES – KNOWLEDGE DISSEMINATION ISSUES

ALLOCATION MODEL FOR SCIENCE SHOPS: A TOOLBOX

ILS DE BAL
Vrije Universiteit Brussel
Ils.De.Bal@vub.ac.be

Abstract

Flemish Science Shops are embedded in Science Communication and financially supported by the Flemish Government. As of 2008, a new model for financing science communication in higher education – involving more partners- has to be developed. Therefore, a primarily discussion of an allocation model had to be conducted.
However, before starting to create an allocation model, we need to have a clear view of the concept of science communication. Which activities belong to science communication and how are science shops imbedded?
We present a model consisting of 3 parts. To guarantee a minimum of service, a fix basis is needed. This basis has to be completed with volume dependent and volume independent parameters.
Volume dependent parameters, like number of students, are very popular wicht governments and large institutions. Numbers are easy to count and particular in advantage of the larger parties.
On the contrary, volume independent parameters are mostly derived from the assignment given by the government and closely related to the content.
When volume dependent parameters reward quantity without having an explicit link with science communication, volume independent parameters reward content and efforts related to science communication.
An ideal model should guarantee stability and a minimum of influence of economical and political fluctuation. Stability for its part can reassure continuity; the same amount of money one can count upon.

1. Allocation needed. Why?

As from January 2003, the Flemish Government finances the science shops in Belgium. Since 2006 a network of 5 science shops – one at each Flemish university – has been established (more on this in the presentation of Sofie Van den Bossche). Due to the changing of the higher education landscape and the complexity that comes along with it, a new way of funding these science shops is requested.

2. Science Shop in Science Communication

Flemish science shops are embedded in science communication, but what does "science communication" comprehends?
"Science Communication = sharing information/constructing a dialogue about science in an (inter)active way through different strategies adapted to specific target groups in order to produce the following responses: awareness, increasing knowledge, opinion-forming, attitude-change and behaviour-change"

How do **science shops** fit into this definition of **science communication**?
A science shop is a service to connect knowledge (=research at a research institution) with society (=civil society organizations). Non-profit organizations (as a specific target group) get introduced and even involved in the process of research. It is an interactive process in

which the organizations brings in their expertise of their work field within plain society, and the researchers, on their turn, initiate organizations into elements of research.
The ultimate goal of such a process is not only to help out the organizations in giving them a(n) (partial) answer to their question, but also to show a glimpse of what research actually is.
With the research results, the organizations gain a lot and so does the research institution. Not seldom are research questions, coming directly from society, totally new and explorative.

3. Funding in 3 parts for science communication

To guarantee a basis of services and to get stability, a solid base funding to start from is required. The base has to be large enough to provide a minimum of services to the target group. Often this minimum is translated into financing the staff.
A second part can be based upon volume parameters (refer to the explanation in 3). The strength within these kinds of parameters is the objectivity. Numbers are qualified by the government and have been checked by the institutions so questions of reliability cannot be raised.
The weakness of such parameters is that the quality cannot be measured, and that there is not much of a link with science shops in particular. Though, volume parameters are very popular, certainly to big institutions. Unfortunately, this doesn't reflect the expertise one has, and worse, it does reinforce competition instead of collegial structures between science shops or science communication units in different institutions.
The third part of financing could be based upon qualitative indicators where these indicators can be specified in both a quantitative and a qualitative way. The most

important advantage of these indicators is that the picture of what is needed to be done to gain the whole envelop of money, is very clear. Obviously, how much funding you'll get at the end, correlates exactly with the efforts one has been taking.

4. Volume dependent funding (science communication – science shop)

One way of funding a service, is relating finance to particular volumes.

A very easy parameter to be taken into account is the number of students. It is obvious that that volume has a direct impact for the university on its efforts to exercise science communication. For science shops working mainly with students, the relation between the volume "students" and science shop is even closer. To assure a certain stability, one may choose to divide the number of students into blocks instead of counting absolute heads of students.

A second possible parameter can be the volume of researchers. Researchers are needed to produce knowledge, new technologies, innovations… Without researchers – in whatever context - there is no science communication, and no science shop. Researchers deliver either know-how, or research results. It is thanks to these results and final research reports that science communication can be practised. Of course this is an adequate parameter!

And is there any better indicator for science shops as the number of research reports?
However easy it may be to calculate numbers, it is more difficult to measure the quality of such a report. Unfortunately, quantity doesn't reflect quality, but is easy to base funding on.

We can surely consider the number of research reports of a science shop as a good parameter, but we have to keep in mind that science shops can also deliver other products than just research rapports.

Three obvious volume based parameters are presented. Yet, we will not state that these are the most appropriate indicators for each region or each financer. To fill the pallet of possible parameters, we offer you a few less evident parameters: academic publications, press releases, projects funded by the EU…

An extra remark is requested for technical reasons. In practice, each indicator can be complex or simple. Neither complexity nor simplicity can guarantee full funding.
On the one hand, the danger of taking absolute numbers of certain volumes may be in the yearly fluctuation of these numbers, and with it the related funding, certainly when financing is also on a yearly basis. On the other hand, if calculations are made complex (weights are given to gender aspects, to scientific domains, …etc.), where is the transparency? And related to that, where is the certainty of obtaining an annual subsidy?

5. Volume independent funding (science communication – science shop)

Another clear way of funding, and particularly attractive, is the volume-independent approach. Volume-independent parameters are more related to what science communication actually is. The advantage for the government is that they can stress what's important according to the pursued policy. On the other hand, the institutions have less freedom to give meaning to science communication. The more detailed the indicator is formulated, the less creative you can be.

A few examples of volume-independent activities:
- Creating a website where all the activities/rapports relating to science communication are announced;
- Organizing at least 1 school related activity to promote science to youth – age 14 up 18
- Organizing minimum 1 school related activity to promote science to children – age 10 up to 12
- Organizing 1 big annual event for the general public.

For Science Shops, the same way of formulating can be handled (and of course funded).

- Creating a website and maintaining this website with monthly news
- Distributing an electronic newsletter twice a year
- Organizing once a year a promotion event to sell research questions of organizations to students
- Cooperating with minimum one other institution/service having activities comparable to Science Shops.

Be aware: a strictly formulated indicator can be more difficult to execute, but is equal for all those who eat from the same cheese. A rather loose indicator is easy to carry out, but it is easy for all your colleagues/competitors to stretch its content.

Considering the relation between the parameters mentioned and the envelop of funding, this question can be raised; is there one amount fixed for every activity to execute OR do you get 70% of the total funding if you have only seven out of ten indicators fulfilled? What's the most interesting? All depends on how the envelop is divided. If there's an amount of money fixed on to an indicator, is it equally divided or is more weight given to a

particular indicator? If a certain indicator has 40% of the total amount, of course it is strongly recommended to give priority to the activity related to that indicator.
Another issue to consider is the strength of your own expertise of your science communication department or of your science shop. When you're at the negotiation table: aim to get the most weight to that indicator that mostly reflects your strength…

6. Recommendation : 1 + 2 + 3 = stability

The ultimate goal is getting science shops structurally funded, without being liable to rapidly changing governmental policy or economic fluctuations. Coherent with funding is stability. Therefore, a stable financial model is an absolute requirement. A large basis which guarantees a minimum of (stable) staff, coupled with on the one hand the volume of several relevant actors (input) and on the other hand with indicators based upon activities; a relative steady financial model can assure the future of a science shop. The first part allows you to invest in experience and to develop the science shop's intellectual capital. With the rest you build your future.