

Fellowship for Journalists

The European Initiative for Communicators of Science

Evaluation of a Professional Education Program

by Jens Schroeter

The results which I would like to present are part of an evaluation of the European Initiative for Communicators of Science which I performed for my diploma thesis. In the following presentation I have concentrated on the primary target group of this initiative, the journalists.

The evaluation was prompted and supported by the organizers of the program: I had the opportunity to use the library of the Max Planck Institute at Martinsried as well as files of the past six years were at my disposal and Eicos paid for fees incurred for mailing questionnaires. Based on the files and the questionnaires I present the following results:

The following material was evaluated: applications from the participants (referred to as Fellows) for the years '93 to '98 and the applications from journalists who were refused in the years '95, '96 and '98. Questionnaires which slightly varied were mailed to all Fellows (at least to those who were available) having participated in the program up to '98. Furthermore questionnaires were sent to those applicants which were refused in '98 and to the inquirers of '98. The term „inquirers“ was used for those journalists who requested application material, however, never applied for the program. The questionnaires were returned in more than 50 % of the cases applying to all three groups. Almost two third of the Fellows and slightly more than half of the refused applicants and the inquirers, respectively, returned completed questionnaires.

In order to assess the effects of a professional education program such as Eicos, it is helpful to keep the intended goals of the program in mind. Again, I would like to point them out briefly. The main goal, even if quite abstract, is to enhance communication, primarily between scientists and journalists, but also between the participants from the individual countries.

During their stay in Martinsried the Fellows work together intensively with the scientists. The experiments which journalists and scientists carried out jointly gave the journalists the opportunity to gain practical experience and to learn about the daily routine of a scientist. It is the organizer's intention to promote an understanding for scientists as individuals. The long-term goal is for jour-

nalists to focus not only on the United States but also on their own country. The contacts made among the participants should form the basis of a European Network of EICOS Fellows. The organizers emphasize explicitly, it is neither in their interest to promote a larger acceptance for gene technology nor do they want to spread specific knowledge regarding molecular biology.

The following results should be viewed taking into consideration these ideas, however, not in the sense of a comparison of nominal and actual values. Also the results cannot give any conclusion as to the situation of science journalists in Europe since the program is too specific and the case numbers too few.

Nearly one fourth of all the participants over the past years came from Germany, 10 % came from The Netherlands, Russia, and 7 % came from France and Spain, respectively. The remaining percentage came from 14 other nations.

Every other journalist works for the print media, every fourth for television and every eighth for radio.

Briefly I would like to present further aspects of the professional status and the academic backgrounds of the participants of the program. More than half of the Fellows are employed, the second largest group works as freelancers. In answer to the question in which department the journalists work, 61% answered „Science and Technology“, 16 % „Medicine and Biology“ and 13% „Environment“.

Asked for the department for which or respectively in which they mainly work two third gave science, with a notable distant of art and culture.

81 % finished their studies, 15 % have a PhD. Natural sciences and mathematics were the subjects which were mentioned most here. Less frequent even were other subjects, such as communication sciences, journalism or other similar subjects.

I would also like to give you some brief information on the profile of the program which the Fellows applied for . More than one third wanted to stay only for the first week at Martinsried, one fourth indicated two weeks and the rest three or more weeks.

60 % were interested in visiting one of the so called external laboratory assignments. Ranking first on the Fellows' list was the „Deutsches Krebsforschungszentrum“ at Heidelberg (German Cancer Research Centre), followed by the Institute Pasteur in Paris, then the H. San Raffaele Scientific Institute in Milan and other Departments/Research Units of the Max Planck Institute at Martinsried.

As mentioned earlier, the personal contacts are an important aspect of the program. For this reason I would like to go into more detail about the contacts of the former participants with the scientists and the other Fellows.

More than 50 % indicated that they are no longer in contact with the scientists at Martinsried, 41 % are irregular and 3 % are regularly in contact with the scientists they have met personally during their stay. In response to the number of scientists they still are in contact with, they replied one or two. This result is not surprising considering the schedule of the program. During the week at Martinsried the Fellows worked closely together with an assigned scientist. This scientist is the person which they will most likely establish a personal relationship with. Furthermore, there are many situations where the journalists get in contact with the Executive Director of the program, Dr. Adelman-Grill.

More than two thirds of the Fellows indicated that the contacts mainly served to ask the scientist for competent expert advice. Almost one fourth used the contact with the scientists as a source of information for writing a report.

The results varied when compared to those Fellows who were assigned to one of the external laboratories. Only 19 % had no contact with the scientists, 75 % were irregular and 6 % were regularly in contact with the scientists. However, the number of scientists of the external laboratories with who the journalists still have contact with is similar to the case described above, between one and two. The function of the scientists for the journalists, however, is the same as in the above case. Half of the journalists asked for competent expert advice, the other half used the contact as a source of information for reports.

Since the intention of Eicos is not only to promote contacts between scientists and journalists, but also between the participants of the individual countries, one question in the questionnaire was whether they still were in contact with the Fellows. 44 % indicated that they had no contact with the other participants, 46 % had irregular, 10 % had regular contact. In this context it is remarkable that 95 % indicated that the journalists they still had contact with, were colleagues from other countries. In this respect, it seems that the program comes close to its intended goal.

Another point which indicates that Eicos promotes international contacts with journalists are the answers to the question which was posed to all three groups, the Fellows, the refused applicants and the inquirers. To the question „how often do you have contact to communicators of Science of other European countries?“, half of the Fellows answered „quite frequently“, „frequently“ or „occasionally“. However, this answer was given by only slightly more than one fourth of the applicants and inquirers.

I am not implying that this is an effect of the program, since no survey was carried out with respect to the contacts existing before the journalists participated in Eicos. It can at least be taken as a slight indication that the Fellows are open to the European perspective.

The organizers explicitly emphasize that their intention is not predominantly to increase acceptance of gene technology within short term, but rather to provide a basis for objective report-

ing in the long run. If viewed under this premise, it is not surprising that the stay and the material which the journalists collected during this period did not result in a flood of reports. More than one fourth of all participants have not produced any reports based on material which they collected during the program. One fifth produced „one to two“ reports, and one fifth „three to five“. With respect to the question on the number of reports which were based on the experience they gained during the EICOS program, over one fourth replied „three to five“ and one fifth even „ten to twenty“.

The topics targetted in those reports range from Alzheimer's disease to Viral Research. Of course, gene technology was mentioned most often, followed by molecular biology and special aspects of molecular biology.

Almost two thirds of the Fellows indicated that after Eicos they did not change the topics they reported on. Likewise, two thirds of the Fellows said that the program has not changed their attitude towards gene technology. A similar percentage of the Fellows did not change their attitudes towards the scientists compared to before. Combined with the questions - which were admittedly carried out very superficially - regarding their personal opinion on gene technology an interesting picture is developed.

Almost all Fellows think that gene technology is „very positive“, „positive“ or „more positive“. This creates the impression that the organizers only invite those journalists who take a favourable view of this controversial field of science.

Taking a look at the assessment of the applicants and inquirers one may get two different views. In this case, the percentage of those who think that gene technology is „very positive“, „positive“ or „more positive“ is not as high; only slightly more than three fourth have such a positive attitude towards gene technology. This may lead to the conclusion that, in fact, only those applicants are invited who are regarded as advocates of gene technology. A conclusion I would not so easily agree to. On the other hand - and I believe this is more realistic - the self-assessment of the journalist that Eicos has not changed their attitudes has to be regarded with some hesitation. All the more since no journalist likes to admit that he can be influenced. Furthermore, as a result of the selection of the questions one problem of the investigation has certainly taken an effect, the mistake of social desirability.

If one takes a look at the answers to the question, „how their audience thinks about gene technology“, a picture is established which can serve as a corrective. At least German scientific journalists, have limited knowledge about the attitude of their audience. They have to rely on assumptions. The question about the attitude of their audience was supposed to cause the journalists to project their own attitude onto their audience. Again the assessment of the Fellows is more positive than that of the applicants and inquirers even if the attitude seems by far not as positive. The

attitude definitely lies between both assessments. Nevertheless, one has the strong impression that the Fellows are more positive towards gene technology than the applicants and inquirers since at least for the projection of their own attitude the mistake of social desirability has probably little effect.

Although Eicos has not changed their attitude towards gene technology and towards the scientists, the participants believe that the program was effective in some ways. Two thirds are of the opinion that the participation had an effect on their career. The indicated effects range from a better understanding for the scientists and their work to the impression that their own reports have improved due to participation in the program.

The initiators would like the journalists to focus more on research results of other European countries since journalists usually report about research results from the United States or from their own country. On the basis of the raised data no statement can be made if Eicos has an influence on the choice of countries about which the journalists will report. It can be said, however, that the circle of elite nations, which journalists give preference to, has increased. The top-five countries which the Fellows use as a source for their reports are the United States, the United Kingdom, Germany, France and equally the Netherlands and Japan, however, ranking far behind the others.

The organizers of Eicos state that their intention is to inform the participants objectively on biologically-oriented research. As mentioned in the beginning, it is neither the main goal to promote acceptance nor to provide special knowledge on molecular biology. However, these intentions are interpreted by Fellows, applicants and inquirers in different ways.

93 % of the Fellows have the impression that it is „definitely“, „very likely“ or „likely“ that the organizer's intention is to primarily provide information in an objective way. At the same time, however, also 68 % are of the opinion that the program aims at promoting the acceptance of gene technology and 86 % believe that the primary intention is to provide the journalists with special knowledge. The applicants and inquirers, who have to rely on assumptions and uncertain images for their assessments, give a higher assessment for all three fields. [Overhead 16]

If one compares the assessment of the Fellows with that of the applicants and the inquirers it can be concluded that at least in the course of the program, the prejudice could be weakened that Eicos mainly aims at promoting acceptance of gene technology. However, also in this case the Fellows might have given answers of social desirability. However, it is very striking that although the journalists believe that the organizers intend to inform objectively, at the same time they assume that the organizers also intend to promote acceptance.

This attitude makes sense, if on the one hand the organizers are believed to inform objectively but on the other hand it is rightly asked for what reason they should do that. All the more as the program annually consumes between 120.000 and 170.000 DM. The Fellows obviously imply that the organizers intend to promote acceptance of gene technology, however, not by using incorrect means. The fellows see the fact that it might possibly be seen as a publicity campaign far more relaxed than the organizers of the initiative, who vehemently fight suspicions like that.

In the end the question arises whether the goals that Eicos achieved the goals they set out to reach six years ago? The journalists who have participated in the program predominantly work in the scientific field. Only a small part works in the news field. And that, although it is known (at least in Germany) that controversial scientific topics in general, and gene technology in particular are more likely to be reported about in the general-, the news- or political sector rather than in the science sector. In addition, a large part of the Fellows has studied natural sciences which of course gives them a better understanding of science. Furthermore, it seems, that preferably those journalists who are invited are very open minded and positive with respect to gene technology. Within the program one can chose between one or several weeks. This, however, might not be suitable for journalists who have to write a new story every day. Considering this, the conclusion that the program aims at the wrong target group of journalists might be correct. This reproach is not new to the organizers. They are right to say that they have a responsibility towards the sponsors of the program and the Max Planck Society as the hosting institute. The reflection to turn to science journalists and to use them in two ways as a multiplier nevertheless makes sense since they do not only write for the audience but also for their colleagues.

A look at the contacts shows that significantly less than half of the fellows are still in contact with the scientists at Martinsried and that slightly more than 50 % are still in contact with participants from other countries. Surely it is a start, but it is still far from the idea of a network. Especially the observation of the program which took place in the scope of this evaluation has shown that there is a lack of an institutionalized communication system where information can be obtained from after the program is finished. This problem could be avoided by offering a personal after-internet-service. Such a service, in contrast to the already existing services - like the Information Service Sciences (Informationsdienst Wissenschaft IDW), the ProfNet or the Media Resource Services - would have the important advantage of not being anonymous but rather very personalized. It seems quite necessary to provide such an opportunity. Even if communication can be improved within the scope of this program, the positive effects will quickly disappear if they are not maintained and cultivated.

In summary, I would like to use a citation of one of the former fellows: „Si Eicos n’existait pas, il faudrait l’inventer“. The question remains whether the same program as six years ago could

be “invented”. Eicos is not a static program. In 1993 they started with an idea without exactly knowing how such a European Initiative could be realized. At that time an international model for Eicos that could be copied did not exist yet. The impending move of Eicos to Göttingen marks the right point in time to think of how the program can be further developed? Should a weekend course only for journalists from Germany be offered as an alternative or in addition to the existing program? How to maintain the contacts and cultivate them further?

Eicos will make advances and in the future may serve as an example of how Public Understanding of Science may be promoted.