Comment

SOCIALLY INCLUSIVE SCIENCE COMMUNICATION

Knowledge°rooms — science communication in local, welcoming spaces to foster social inclusion

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ABSTRACT: *Socially inclusive science communication has to take place where people spend most of their time — within their communities. The concept of knowledge°rooms uses empty shops in socially disadvantaged urban areas for offering low-threshold, interactive science center activities. The commentary carves out essential features that contributed to the success of the pilot project. Most importantly, the knowledge°rooms had to be welcoming and comfortable for visitors of various backgrounds. The spaces were easy to access, the initiators were seen as trustworthy actors by temporarily becoming part of the community and the offer was respectful of the time and knowledge of its users.*

We strongly believe that interactive science communication can be a way to empower people as they experience their own curiosity and competence through engaging with science. Thus, we are striving for a setting that is accessible and open to everyone, especially to those that are socially disadvantaged and have little relation to educational or cultural offers. But how should we structure a science communication offer with minimal threshold in order to address audiences that are usually difficult to reach? And how can we contribute to social inclusion, not only understood as empowerment, but also as bringing people with diverse social, economic, cultural, educational backgrounds together and in dialogue with each other?

In 2013, we started a pilot project termed "knowledge°rooms" in Vienna, Austria. The basic idea was to temporarily offer science center activities in empty shops in underprivileged urban districts — anyone passing by could just walk in and start engaging. The "pop-up science centers" were well accepted by a socially mixed audience, thus contributing to social inclusion in urban districts. We attribute success to many factors which we analyze in this commentary. Most importantly, the knowledge°rooms were welcoming and comfortable for the visitors. Key features were that the spaces were easy to access, that we were seen as trustworthy actors inside the communities and that the offer was respectful of time and knowledge of our potential visitors.

Facts first

Between April and November 2013 we ran 3 consecutive knowledge°rooms for 8 weeks each, open 2.5 days per week, staffed with 2 explainers, some of them with migrant background. All 3 locations were in areas of Vienna with a socially disadvantaged population with a high migrant proportion. During the 72 open days, we managed to attract ca. 3500 people, mostly children up to the age of 13 (many alone, some accompanied by a (grand)parent), teenage and school groups as well as a few adult groups, like repair café members and German-as-a-foreign-language courses. Many young visitors stayed for hours and turned into regular guests, coming in every day, becoming mini-explainers themselves.

Highlights for the visitors were e.g. shooting own microscope photos, constructing paper rockets, playing discussion games, dismantling computers, making ice cream, building exhibits, and "inventing" new experiments (c.f. some impressions in Figure 1). Based on feedback from visitors and explainers as well as the accompanying social science research, we experimented with content at each location, e.g. adding exhibit-building or content-focused weeks. Explainers were free to act on visitors' requests or experiment with their own ideas. The knowledge°rooms managed to create an intimate, lively, sometimes more chaotic, sometimes more concentrated, but usually unique and wonderful atmosphere.

(a) SCN/Esther Fischer   **(b)** SCN/Petra Preinfalk   **(c)** SCN/Petra Preinfalk

(d) SCN/Barbara Streicher   **(e)** SCN/Petra Preinfalk   **(f)** SCN/Esther Fischer

Figure 1. Three temporary knowledgerooms were realised in empty shops in Vienna in 2013, where visitors with diverse social backgrounds actively participated in a wide range of activities.

Easy to access

"Meeting people where they are" is a trendy term in science communication, but usually related to addressing audiences according to their knowledge levels. We took it literally. By installing the knowledge°rooms directly in the neighborhoods of communities we wanted to address, little energy or preparation was required on their side in order to find the offer. We were surprised by how small the radius of the communities actually was. Many visitors of the knowledge°room lived in close walking distance to our venue and we learned that some of them rarely leave their area at all, let alone go to the city center or a museum. This strongly emphasizes the importance of keeping such initiatives very local and accessible.

Knowledge°rooms were deliberately put up in empty shops. This created a familiar setting, as everyone is used to entering a shop, browsing its content and leaving whenever ready. Thus, visitors did not have to learn new rules or adapt to an unusual culture.

In contrast to most museums, the knowledge°rooms did not have an entrance fee or even someone checking those who entered. Thus, no socioeconomic barrier was put up, large families were welcome and a come-and-go atmosphere was established.

Knowledge°rooms are temporary spaces in venues that were previously used for other purposes. Although we introduced a clearly recognizable design, we deliberately maintained an improvised atmosphere, consistent with our limited time and budget. Our goal was to create a setting which would not intimidate people, but could be regarded as "a place for us". The design aimed at an atmosphere between workshop- and living-room. Decorating the walls with our logo by spraying it as graffiti bubbles create a mix of design and DIY elements that did not brand the room for specific social groups, but kept it open and accessible for everyone, while at the same time encouraging visitors to really *use* the materials offered there.

Regarded as trustworthy

Being accessible for everybody was as important as being regarded as a trustworthy initiative. In every location, we contacted local community groups, building up relationships with some members of the community. This enabled us to get a sense of the users we might be getting in the knowledge°room and learn about their priorities, and at the same time made our offer known to them. We invited them to spread the word and collaborate, e.g. by using the room for their own activities. For some locations, teenagers from local youth clubs helped to decorate the room with graffiti, experiencing it as "their" space even before the opening. Listening and patience were key to all these interactions, as was being present at local events and meetings, sometimes even without a clear role or agenda. This proved to be useful in building up connections that could then stimulate word of mouth and helped to extend the trust in local actors also towards us.

The knowledge°rooms were deliberately put up in communities with high migrant backgrounds. To include all ethnicities, we made foreign languages explicitly wel-

come. The flyer and window labels contained key words in the prevalent migrant languages (Turkish, Bosnian, Serbian, Croatian, Polish, etc.) and rules of the house were hung up in several translations. Additionally, some of the explainers (the staff of the knowledge°room) spoke those languages themselves. Explainers with a migrant background or with even a slight accent in their German served as positive connectors and role models for the visitors.

Respectful of their time and knowledge

Our attitude is to be at eye-level with our visitors and not pretend to know what they should know or when and how they should attain it. We therefore made sure that our offer was seen as a free-choice environment, as an open house without signing up for attending an educational offer, so that anyone could come and go as they chose. We even did not advertise for school groups to visit, in order to stay deliberately an out-of-school environment with a special, informal learning atmosphere.

All knowledge°rooms had access to a close-by outdoor space that at times we used for some teaser activities — a sidewalk, a pedestrian area or a park. These offers served as an advertisement and invitation and at the same time allowed passers-by to get a sense of what was going on in the knowledge°room without any commitment, as they could break away at any moment. Those areas were also useful for activities that require an outdoor space (rocket launches) and as a connecting space between visitors and the community — for example, when children who were regular users of the knowledge°room performed a science show with their favorite experiments in the park with their families as an audience.

Such highlight events were an indicator of empowerment. But even with newcomers, we tried to explicitly welcome their know-how and competence, linking experiments and interactive exhibits to their prior knowledge and to experiences from daily life. We took great care in developing modular content and in training and supporting the explainers in how to facilitate in this very special setting. (But that would deserve a separate story. . .)

Based on the pilot project, we were able to identify some key factors enabling to attract "difficult-to-reach" audiences with diverse socio-economic background: the location inside the community, the type of space (an everyday place like, e.g. an empty shop), and the design with an air of improvisation. Equally important was the concept of openness which was reflected in the indoor-outdoor offers, the self-chosen investment of time, the multiple languages addressed and the direct contact with communities groups and representatives with the possibility to develop tailor-made activities and content together. In short, our claim is to generate knowledge°rooms where we do science communication WITH the communities, not FOR them.

Authors

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