

The impact of Science Literacy delivery methods - what works?

Bibliography

Seminars | Group 1. Events, meetings, performances

Ver. 3.00

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Introduction

This thematic bibliography is the result of research to survey existing literature available on Science Literacy delivery methods.

The search was carried out by retrieving documents and articles from a wide range of sources, including research databases, Google Scholar, ResearchGate, subject databases, open access repositories etc. using keyword combinations.

The results of the resource discovery are divided into two groups: one containing impact assessments using qualitative, quantitative or mixed method (both qualitative and quantitative) approaches to data collection and a second including descriptive resources, which encompass, for example, reviews, guides, handbooks, reports and project reports.

This bibliography is work in progress and is not designed to be fully exhaustive or complete. We will be pleased to receive suggestions and recommendations for additions that can contribute to the understanding of science, its applications and, to the promotion of science literacy.

Groups and methods list

During the first part of the Desk Research phase of this project (i.e. Task 1), the team identified 42 single-mechanism approaches, 2 composite approaches and 1 related approach that were relevant to the delivery and dissemination of scientific information. The list of single mechanisms was further organised into 7 thematic groups, as presented in the following Table.

Single mechanism approach	Group
Exhibitions, Expo, Festivals, Movies, Picnics, Science fairs, Seminars, Talks, TED Talks, Theatre, Workshops	1. Events, meetings, performances
Colloquia, Courses, Curricula, E-learning, Webinars	2. Education and training – including online
Animations, Books, Brochures, Cartoons, Comics, Games, Graphics, Posters, Publications, Radio, Reports, TV, Videos	 Traditional publishing and journalism print and broadcast
Competitions, Experiments, Makerspaces, Mobile classrooms, Mobile laboratories	4. Activities and services
Blogs, E-books, E-zines, Mobile Apps, Podcasts, Social media, Websites, Wikis	5. Online interactions
Composite approaches	
Multiliteracies Multimodalities	
Related approach	
Citizen Science	

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Impact Assessment

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- Fong, Bonnie L. 2016. "Assessing Graduate and Undergraduate Student Needs to Redesign a Chemistry Seminar Course." Science & Technology Libraries 35 (1): 70–90. <u>https://doi.org/10.1080/0194262X.2015.1127794</u>.
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Descriptive Resources

- Garritano, Jeremy R. 2008. "Ice Cream Seminars for Graduate Students: Imparting Chemical Information Literacy." *Public Services Quarterly* 3 (3–4): 53–70. <u>https://doi.org/10.1080/15228950802110452</u>.
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- Scalfani, Vincent F., Patrick A. Frantom, and Stephen A. Woski. 2016. "Replacing the Traditional Graduate Chemistry Literature Seminar with a Chemical Research Literacy Course." *Journal of Chemical Education* 93 (3): 482–87. <u>https://doi.org/10.1021/acs.jchemed.5b00512</u>.