JCOM

RE-EXAMINING SCIENCE COMMUNICATION:
MODELS, PERSPECTIVES, INSTITUTIONS

Reorienting science communication towards communities. Supplementary material

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Previous science communication studies oriented towards communities

Aguirre, C. (2014). 'Science Centers. Which role can they play to participate in a city social reconstruction?'. *JCOM* 13 (02), C04. https://doi.org/10.22323/2.13020304.

Allen, S., Kastelein, K., Mokros, J., Atkinson, J. and Byrd, S. (2020). 'STEM Guides: professional brokers in rural STEM ecosystems'. *International Journal of Science Education, Part B* 10 (1), 17–35. https://doi.org/10.1080/21548455.2019.1700317.

Boyer, L., Roth, W.-M. and Wright, N. (2009). 'The emergence of a community mapping network: coastal eelgrass mapping in British Columbia'. *Public Understanding of Science* 18, 130–148. https://doi.org/10.1177/0963662507077509.

Brown, A., Roche, J. and Hurley, M. (2020). 'Engaging migrant and refugee communities in non-formal science learning spaces'. *JCOM* 19 (04), R01. https://doi.org/10.22323/2.19040601.

Buckland-Nicks, A., Castleden, H. and Conrad, C. (2016). 'Aligning community-based water monitoring program designs with goals for enhanced environmental management'. *JCOM* 15 (03), A01. https://doi.org/10.22323/2.15030201.

Canovan, C. (2020). 'Sharing the pi: are incentives an effective method of attracting a more diverse science festival audience?'. *International Journal of Science Education, Part B* 10 (3), 217–231. https://doi.org/10.1080/21548455.2020.1753126.

Cheeptham, N., Mahara, S., Antoine, M., Insuk, C. and Loy, K. (2020). 'Aboriginal youth summer camp in science and health science: a Western Canadian university review of 10 years of successes and learning'. *International Journal of Science Education, Part B* 10 (3), 204–216. https://doi.org/10.1080/21548455.2020.1748743.

Coleman, A. (2012). 'Towards delivering e-health education using Public Internet Terminals (PIT) systems in rural communities in South Africa'. *JCOM* 11 (04), A01. https://doi.org/10.22323/2.11040201.

Duchsherer, A., Jason, M., Platt, C. A. and Majdik, Z. P. (2020). 'Immunized against science: narrative community building among vaccine refusing/hesitant parents'. *Public Understanding of Science* 29 (4), 419–435. https://doi.org/10.1177/0963662520921537.

Garland, M. J. (1999). ‘Experts and the public: a needed partnership for genetic policy’. *Public Understanding of Science* 8 (3), 241–254. https://dx.doi.org/10.1088/0963-6625/8/3/308.
Godard, B., Ozdemir, V., Fortin, M. and Égalité, N. (2010). ‘Ethnocultural community leaders’ views and perceptions on biobanks and population specific genomic research: a qualitative research study’. *Public Understanding of Science* 19 (4), 469–485. https://doi.org/10.1177/0963662509104721.
Griffin, R. J. and Dunwoody, S. (1997). ‘Community structure and science framing of news about local environmental risks’. *Science Communication* 18 (4), 362–384. https://dx.doi.org/10.1177/1075547097018004005.
Hoover, E. (2016). “‘We’re not going to be guinea pigs;” Citizen science and environmental health in a Native American community’. *JCOM* 15 (01), A05. https://doi.org/10.22323/2.15010205.
Kim, H., Cho, S. H. and Song, S. (2019). ‘Wind, power, and the situatedness of community engagement’. *Public Understanding of Science* 28 (1), 38–52. https://doi.org/10.1177/0963662518772508.
Kim, H.-S. (2012). ‘Climate change, science and community’. *Public Understanding of Science* 21 (3), 268–285. https://doi.org/10.1177/0963662511421711.
Latowsky, G. (2003). ‘Community-based, participatory research in Lawrence, Massachusetts, flags environmental health hazards and fuels education and action’. *Science Communication* 25 (2), 204–208. https://doi.org/10.1177/1075547003259449.
McGillion, C. (2017). ‘Animation as a science communication tool in Timor-Leste’. *Science Communication* 39 (2), 278–285. https://doi.org/10.1177/1075547017696164.
McNew-Birren, J. (2014). ‘Public understanding of local lead contamination’. *Public Understanding of Science* 23 (8), 929–946. https://doi.org/10.1177/0963662513500743.
Merson, M. (2017). ‘Four principles to guide interactions: assisting communities confronting environmental contamination’. *Science Communication* 39 (1), 125–136. https://doi.org/10.1177/1075547016688685.
Miyamoto, K., Iwakuma, M. and Nakayama, T. (2015). ‘Residents’ awareness and attitudes about an ongoing community-based genome cohort study in Nagahama, Japan’. *Public Understanding of Science* 24 (8), 957–969. https://doi.org/10.1177/0963662515574455.
Ofori-Parku, S. S. (2016). “‘Whale deaths” are unnatural: a local NGO’s framing of offshore oil production risks in Ghana’. *Science Communication* 38 (6), 746–775. https://doi.org/10.1177/1075547016677832.
Ofori-Parku, S. S. (2018). ‘Tacit knowledge and risk perceptions: Tullow Oil and lay publics in Ghana’s offshore oil region’. *Public Understanding of Science* 27 (2), 197–213. https://doi.org/10.1177/0963662516685488.
Peters, L. (1992). ‘The District Education Extension Agent as “strategic broker”: toward a new vision for federally sponsored dissemination’. *Science Communication* (as *Knowledge: Creation, Diffusion, Utilization*) 13 (3), 320–329. https://dx.doi.org/10.1177/107554709201300309.
Putsche, L., Hormell, L., Mihelich, J. and Storrs, D. (2017). “‘You end up feeling like the rest of the world is kind of picking on you”: perceptions of regulatory science’s threats to economic livelihoods and Idahoans’ collective identity’. *Science Communication* 39 (6), 687–712. https://doi.org/10.1177/1075547017730586.

Roger, E. and Klistorner, S. (2016). 'BioBlitzes help science communicators engage local communities in environmental research'. *JCOM* 15 (03), A06. https://doi.org/10.22323/2.15030206.
Roth, W.-M. and Lee, S. (2002). 'Scientific literacy as collective praxis'. *Public Understanding of Science* 11 (1), 33–56. https://dx.doi.org/10.1088/0963-6625/11/1/302.
Sandhaus, S., Kaufmann, D. and Ramirez-Andreotta, M. (2019). 'Public participation, trust and data sharing: gardens as hubs for citizen science and environmental health literacy efforts'. *International Journal of Science Education, Part B* 9 (1), 54–71. https://doi.org/10.1080/21548455.2018.1542752.
Sankatsing Nava, T. and Hofman, C. L. (2018). 'Engaging Caribbean island communities with indigenous heritage and archaeology research'. *JCOM* 17 (04), C06. https://doi.org/10.22323/2.17040306.
Sannazzaro, J. (2016). 'Citizen cartography, strategies of resistance to established knowledge and collective forms of knowledge building'. *Public Understanding of Science* 25 (3), 346–360. https://doi.org/10.1177/0963662514554757.
Schoerning, E. (2018). 'A no-conflict approach to informal science education increases community science literacy and engagement'. *JCOM* 17 (03), A05. https://doi.org/10.22323/2.17030205.
Streicher, B., Unterleitner, K. and Schulze, H. (2014). 'Knowledge rooms — science communication in local, welcoming spaces to foster social inclusion'. *JCOM* 13 (02), C03. https://doi.org/10.22323/2.13020303.
Tan, S. Z. K. and Perucho, J. A. U. (2018). 'Bringing science to bars: a strategy for effective science communication'. *Science Communication* 40 (6), 819–826. https://doi.org/10.1177/1075547018808298.
Thakadu, O. T. and Tau, O. S. (2012). 'Communicating environment in the Okavango Delta, Botswana: an exploratory assessment of the sources, channels, and approaches used among the Delta communities'. *Science Communication* 34 (6), 776–802. https://doi.org/10.1177/1075547012437277.
Tveden-Nyborg, S., Misfeldt, M. and Boelt, B. (2013). 'Diffusing scientific knowledge to innovative experts'. *JCOM* 12 (01), A03. https://doi.org/10.22323/2.12010203.
Ward, V., Howdle, P. and Hamer, S. (2008). 'You & your body: a case study of bioscience communication at the University of Leeds'. *Science Communication* 30 (2), 177–208. https://doi.org/10.1177/1075547008324385.
West, K. M., Hopkins, S. E., Hopper, K. J., Mohatt, G. V. and Boyer, B. B. (2013). 'Found in translation: decoding local understandings of genetics and heredity in a Yup'ik Eskimo community'. *Public Understanding of Science* 22 (1), 80–90. https://doi.org/10.1177/0963662510397224.
Yli-Kauhaluoma, S. and Hänninen, H. (2014). 'Tale taming radioactive fears: linking nuclear waste disposal to the "continuum of the good"'. *Public Understanding of Science* 23 (3), 316–330. https://doi.org/10.1177/0963662513503773.