

## Representation, Understanding and Application of Scientific Knowledge in the Fforest Fawr Geopark (Wales) and the Muroto

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The opportunity to be involved in scientific activities must be provided to a wide variety of people to improve public awareness of science. Geoparks, which are promoted with the assistance of UNESCO, have great potential to appeal to and involve a variety of people and are expected to make a positive impact on society. Geoparks are sites with geological heritages and they aim to conserve these heritages and use them for education, research and local sustainable development.

Geopark activities including conservation, education and tourism are grounded in the communication of the values and characteristics of Geoparks. This study explores how scientific knowledge is represented, understood and applied through information material by focusing on the process of this communication and associated influential factors, and offers constructionism. To emphasize the characteristics of the communication, a comparative study into Fforest Fawr Geopark in Wales and Muroto Geopark in Japan was conducted.

An analysis of information material, qualitative interviews and self-completion questionnaires for visitors was conducted to investigate how scientific knowledge was represented in the material, what the Geopark personnel intended to achieve through the material, how the scientific knowledge was received by visitors and what role it played in the visitors' experience in the Geoparks.

The study revealed the relationships between the information material, the Geoparks' expectation and visitors' experience of the communication of scientific subjects. Between the Geoparks there were differences in visitors' interests, experience of, awareness and understanding of the Geoparks. The intention of the material, the characteristics of the Geoparks, nationalities, gender and age could be considered as influential factors on the results.

The study concludes that Geoparks have great potential to involve a wide variety of people and that communication in Geoparks is diverse depending on the situation of the Geoparks and their visitors.

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