

BIODIVERSITY ITS CONSERVATION AND THE ROLE OF SOCIAL MEDIA PLATFORMS- AS FACILITATOR

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Abstract

Social media plays an inevitable role in the life of millions of people worldwide. Social media platforms are increasingly being used for various purposes in a wide range of fields, which also includes biodiversity conservation. Through these platforms we can strengthen our biodiversity conservation effort, which is utmost necessary as biodiversity forms the critical foundation for the human well being and development. For conservation of biodiversity it is better to understand how various ways can impacts biodiversity at local and global levels. This paper tried to evaluate the potential of social media platforms in biodiversity conservation in Bareilly district of Utter Pradesh State of India. This paper also discusses the role that social media may play in biodiversity conservation for future human existence and sustainable development. The findings of research shows that there is great potential of social media for conservation to take place provided that it has specific rather than general aims.

Keywords: *Biodiversity, conservation, sustainable human development, social media, social media platforms, communication*



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Introduction



*Smart phones and social media expand our universe.
We can connect with others or collect information
easier and faster than ever.*

Daniel Goleman

Social media is a phrase being tossed around a lot these days, it is often seen merely as a way to pass the time or stay connected to friends and family. There are many things the social networking technologies allow a person to do. For instance, social networking sites allows one to share any form of a data-ranging from a simple picture or an image or links of websites which contain a large amount of information. It helps a person at one end of the world connect and exchange ideas with a person at the other end of the world. It is not just a source of entertainment. Since it is so

influential, we can adopt its benefits to gain positive results in education. We all agree that learning is not just studying a textbook but also interaction and communication. Until a few decades ago the latter aspect of learning was limited to the physical space of a classroom. Now however, the social media has widened its dimensions. Its use is rapidly expanding into the educational sector. There will be around 250.8 million social networking site users in India by 2017. Comparing 2015 to 2017, the use of social media has increased approximately 38.02%. The popularly used social media used in education includes Facebook, Twitter, LinkedIn, WhatsApp, Google+, message boards and blogging etc. among which Facebook leads the rest. Social media is about collaborating, networking, sharing and generating knowledge and content, and all of these features are of great value in the context of education. Social media plays an important role in every student's life. It is easier and convenient to access information, provide information and communicate it via internet in a very less time. Teachers and students are nowadays connected to each other and can make good use of these platforms in their teaching-learning whether it is environmental education or education specially related to sustainable human development.

Biological diversity provides the stability and sustainability to the world's natural systems. It has been agreed globally now that the path of sustainable development is deeply connected to biodiversity in several ways. Biodiversity forms the critical foundation for the human well being and development. To take necessary steps to conserve the biodiversity and for maintaining life support system, it is important to have participation of young generation. It is the call of millennium to sensitize young people for playing their roles and responsibilities effectively in the process of biodiversity conservation which leads to advance progress in human resource development.

According to former Chairman of the National Biodiversity Authority of India Balakrishna Pisupati, the media can help spread the message on the value of biodiversity. "Media and social networks in today's world are constantly redefining our approaches and focus on outreach and public awareness on a range of issues starting from social to political and environmental." Therefore, Social media is the new mainstream ways of sharing our life activities. It is also a must preferred communication medium so, it would be awesome to promote our Biodiversity and conservation campaign through the Social Media. Social Media platforms can play massive role in Biodiversity Conservation.

Social Media Platforms

It is sometimes difficult to answer the question of what the social media platforms are. It is the collective term used for online communications channels dedicated to interaction, content-sharing and collaboration. Websites and applications dedicated to forums, social networking, and wikis are among the different types of social media platforms. Social Media Platforms today is the best way to inform people about latest happening around them and the world. There are many interesting ways in which it can be used in the 21st century teaching and learning. Nowadays, many educational establishments are beginning to embrace social media into their everyday life.

Biodiversity

Biodiversity is the short term used for "biological diversity," it generally refers to the variety and variability of life on Earth. According to the United Nations Environment Programme, biodiversity typically measures variation at the genetic, the species, and the ecosystem level. Genetic meaning that there are genetic variations between individuals of same or different populations of the same species. Variety at the level of species means existence of different species that are inter-related by taxonomy. Ecosystem diversity or biodiversity is thus clearly not definable as there are not distinct boundaries between the ecosystems and they merge into each other.

Biodiversity and Social Media

The development of science and technology makes the human to lead a sophisticated and luxurious life. Human beings are utilizing environmental resources to meet their ever-increasing needs for a better living. It leads to serious ecological and environmental imbalances. Mahatma Gandhi once said "Nature can meet all the needs of men, not the greed" today irrespective of our



needs everyone is rushing towards greed. Due to this our global universe is facing great problems in the means of pollution, deforestation, industrialization, acid rain, ozone layer depletion, environmental stress related illness and much more health problems so on. Thus there is an urgent need to think of strategy for human's survival in this universe. To overcome this existing condition, younger generation should have knowledge, awareness,

attitudinal change and related skills to overcome the environmental related consequences. Environmental knowledge for Awareness is essential for action to take and education can play a vital role in this direction. Education is the sole force to create awareness and healthy attitudinal change in our younger generation. So our education system as whole is oriented and equipped with environmental and natural way of inculcating environment values in our children. To defend and improve the environment for present and future generations has become an imperative goal for mankind and to achieve this goal social media platforms come out as bone. They can help us out in spreading environmental knowledge, to handle issues related to biodiversity and its conservation.

Objectives

Keeping the above facts in mind, the objectives of this study was set to assess the role of social media platforms in biodiversity issues and in its conservation regarding:

- 1) Confidence in knowledge and understanding of biodiversity;
- 2) Interest in biodiversity and its conservation;
- 3) Confidence in process skills

De-limitations

The study was delimited to the prospective teachers pursuing B.Ed. from Department of Teacher Education of Bareilly College affiliated to M.J.P. Rohilkhand University, Bareilly

Methodology

By using social media platforms, we tried to assess whether it is possible to enhance knowledge and to change the attitude of students towards biodiversity and its conservation. This study was quasi-experimental in nature and the experimental and control group design was used for the study.

Population and Sample

The study was conducted on prospective teachers pursuing B.Ed. from Teacher Education Department of Bareilly College Bareilly. The participants for the research were from age group between 20 to 30 years aprox. A total of 100 prospective teachers were there in the department based on their interest, commitment and motivation for biodiversity and related issues 50 were randomly selected. They were then grouped in experimental and control group randomly. Both Control and Experimental groups have 25 prospective teachers each.

Instrument

A self developed questionnaire was used to assess various issues on biodiversity and its conservation. The questions were grouped into three categories to compare overall reported change in behavior related to: 1) Confidence in knowledge and understanding of biodiversity; 2) Interest in biodiversity and its conservation; 3) Confidence in process skills. In the final draft total 15 questions 5 from each category were included. An open ended questionnaire was used to measure the perception regarding biodiversity and its conservation for both pre and post tests.

Procedure

By the consent of institution first of all a pre test was administered on the sample to know the entry level of the participants. After that the experimental group was given the treatment, for this the experimental group was motivated to connect to the active social media platforms like Facebook, Twitter, WhatsApp, and YouTube. These were used to expose the participants to understand the importance of biodiversity, threats to Biodiversity and the ways to conserve it. A closed facebook and wathsApp group was also created to share the posts directly or indirectly connected with biodiversity or its conservation. Such posts were also shared with each participant. The treatment also includes interactive discussion sessions among participants about such topics. The researchers introduced the activity and also answered questions at the time of interactive discussions. The feedback was also received from the prospective teachers. This was continued for 4 weeks. Control group studied as usual on set pattern of the institution. The prospective teachers participating in the experimental group were then compared with control group.

Validity of Instrument

The questionnaire we followed was based on the role of social media platforms in spreading biodiversity knowledge, their interest and changing attitude towards biodiversity and its conservation. This questionnaire was used to measure the perceptions of prospective teachers in three areas: 1) confidence in knowledge and understanding of biodiversity; 2) interest in biodiversity and its conservation; 3) confidence in process skills. In this way the tool possesses content validity. Before administering the questionnaire it was discussed with 10 educationist related to teacher education and 7 academicians related to ICT and other

disciplines. On the bases of their opinion and suggestions final draft was prepared. They asserted it as appropriate for study.

Analysis of the Data

The questions of the questionnaire were grouped into three categories to compare overall reported changes in behavior: confidence in biodiversity knowledge, interest in biodiversity and skills in biodiversity. Percentage was calculated to find the differences across pre and post tests for each of these measures.

Results and Discussion

A comparative assessment of prospective teachers' change in behaviour related to biodiversity and the related issues were done. The results obtained from the experiment on using social media platforms for biodiversity conservation for future human existence are presented below.

A. Result related to Confidence in Biodiversity Knowledge

On the basis of calculated means prospective teachers of experimental group in the post test phase significantly increased their confidence in biodiversity knowledge viz, defining biodiversity, identifying principal threats, providing examples of how biodiversity is important to human society, describing methods and strategies used in conservation, identifying underlying issues in a conservation controversy, analyzing/synthesizing information on an issue. This increase was nearly 66.67% for experimental group. There was found no significant changes in control group prospective teachers between pre and post test analysis since they have no exposure to active social media platforms related to biodiversity and its conservation. This is shown graphically in Figure 1.

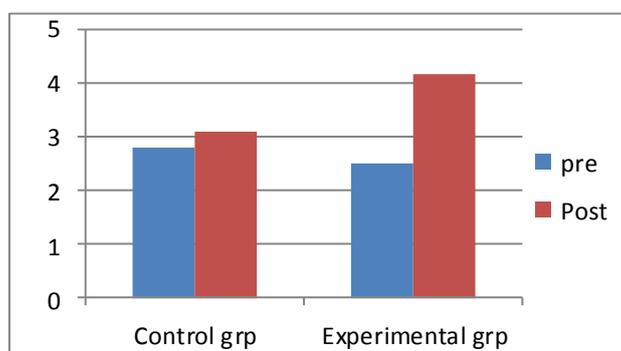


Figure 1: Graph showing Confidence in Biodiversity Knowledge

B. Result related to Interest in Biodiversity Conservation

Prospective teachers showed their keen interest in biodiversity conservation between pre and post testing phases. The questionnaire to test the prospective teachers understanding and the relevance of biodiversity to real world issues explore their interest in taking additional courses related to biodiversity and conservation, majoring in a related subject, exploring career opportunities, considering changes in lifestyle choices. Overall 60.61% increase in experimental group was evident from the post test scores. There was found no significant changes in control group prospective teachers between pre and post test analysis since they have no exposure to active social media platforms related to biodiversity and its conservation. This is shown graphically in Figure 2.

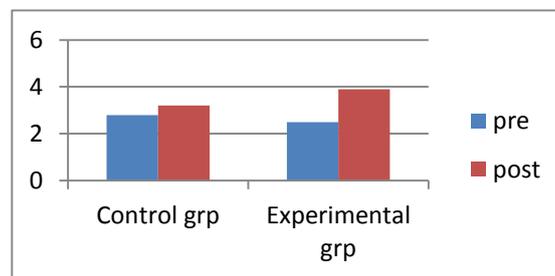


Figure 2: Graph showing Interest in Biodiversity Conservation

C. Result related to Biodiversity Process Skills

In terms of biodiversity process skills, prospective teachers of experimental group reported significant gains nearly 62.5% between pre and post testing phase having confidence in their skills of identifying conservation issues such as oral and written communication, identifying underlying conservation problems, gathering credible information, sorting and filtering diverse sources of information, predicting potential outcomes, applying critical thinking and sharing the content with others. There was found no significant changes in control group prospective teachers between pre and post test analysis since they have no exposure to active social media platforms related to biodiversity and its conservation. This is shown graphically in Figure 3.

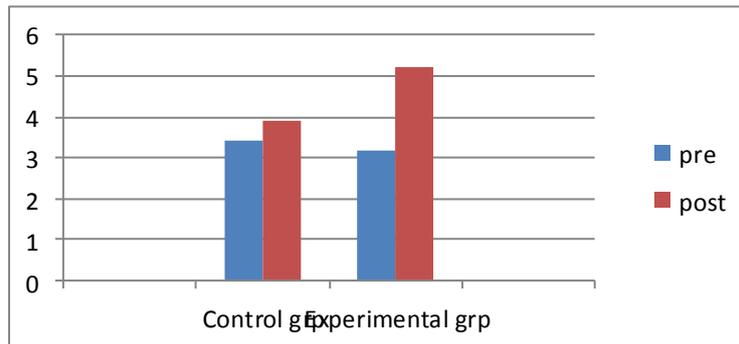


Figure 3 Graph showing Biodiversity Process Skills

Conclusion

The proposed active use of social media platforms in changing the behavior of individual for biodiversity education for sustainable development encompasses comprehensive aspects of prospective teachers' cognitive, affective and behavioural development related to the perception and understanding of local biodiversity and its conservation. Use of social media can make people more aware of their local and global biodiversity also the flora n fauna. It may have long term impacts on prospective teachers' attitudes towards local biodiversity and also in shaping their future life. The sharing of biodiversity related posts help prospective teachers to acquaint with the local biodiversity problems, and create an interest, motivation, commitment and action. From the research it is apparent that active social media platforms on using in a proper channelized way increases the prospective teachers' knowledge, interest and skills in order to protect and conserve global and local natural resources and biodiversity. This study therefore, stresses the need to extend the better use of social media in an effective manner to the immediate and future concerns of biodiversity and its conservation. It can also be used effectively in inculcating a culture of biodiversity conservation among prospective teachers.

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