Children Nature Education About Names of Ocean Fish in Banyuwangi

Triana Kartika Santi
Biological Education Department, University of 17 Agustus 1945 Banyuwangi East Java, 68416, Indonesia
E-mail: g.rubiono@fdi.or.id

Abstract - Children can learn about biology from the nature. Children in fishing area of Muncar sub district in Banyuwangi learn about name of fish from community in daily life. This research is aimed to identify children learning about the names of ocean fish in Muncar Banyuwangi. The research is conducted by interviewing the children, the fishermen and the local society. The result shows that there are a lot of local names of fish found in learning process. The children tend to be familiar with these names rather than biological names. It is also found that names of fishes could be categorized in three different terms.

Keywords: Children, learning, fish, Banyuwangi

1. Introduction

Children education is important matter in society. The education of the children can be done in formal institution such as school or education in family and in the community. The education provide knowledge for the children to help them in the future. Schooling can affect strategies used to recall information, by changing the brain organization of cognition in a myriad of ways [1].

Children also learning things from the society and the natural environment. Recent research also suggests that even views of nature can affect children’s cognitive capacities, in particular their ability to concentrate [2]. Children are inherently connected to nature and fascinated by living things; there is a significant body of research discussing the benefits of children interacting with nature on a regular basis [3]. Early childhood appears to be a critical point in maximising the chances of such formative experiences by facilitating access to natural areas. Even among older children, though, there are profound benefits to encouraging time spent in natural habitats [4], a feeling of connection to nature explained a portion of the effect that time spent outdoors has on environmental stewardship behaviors [5].

Banyuwangi is a district with coastal area. Muncar is a sub district with relatively large fishermen community. Muncar is a fishing base that provide 90% ocean fishing product in Banyuwangi. This sub district has 13 km of coastal line with 5.5 km fishing harbour. Geographically Muncar District is located at position 08°10’ - 08°50’ LS or 114°15’ - 115°15’ east and has a bay called Pangpang bay by surrounding community. The population is 130,280 and until 2014 there are 13,203 people living as fishermen [6]. Muncar also the biggest fishing production in East Java province [7].

Biologists have long been concerned about the quality of undergraduate biology education [8]. Especially in marine biology, maritime english teachers must improve the skill with maritime knowledge to optimize the learning process [9]. A research shows that fishing expeditions are fundamental channels of children’s education and of women’s empowerment that is essential for maintaining the social cohesion [10].
Research in biology education in Indonesia especially in fish subject has done for inventory types of fish [11, 12, 13], props for fish organs [14], and android application [15]. In the learning process, the research has done for learning process in maritime education [16] and language difficulties faced by students [17].

Maritime biology is an important education subject in Indonesia. A large coastal area in Indonesia is a potential resource for the future generation. The learning process is important to studied in order to give the children about maritime knowledge. This knowledge becomes provision for the marine resources management for the next generations.

Children in Muncar are familiar with fishing activities among the fishermen. Biology learning especially in names of fish happen in daily activities. This research is aimed to identify children learning about the names of ocean fish in Muncar Banyuwangi.

2. Method

The research is conduct by direct interviewing method with children and fishermen in fishing area. The interview is also done local community citizen in surrounding area. The interview is aimed to identify the learning process and the names of fish that learn by the children.

3. Result and Discussion

The interview result shows that children learn about names of fishes from daily life activities. As a fishing area, fish is a common thing in Muncar. Children learn from community such as family, fishermen, from each other and from their playground in the nature as children are play in the coastal area.

There are fish names that categorized as local name such as lemuru, layang, mrenying, banyar, putihan, belanak, tongkol, layur, mungsing, lujung, etc. The children tend to be familiar with these names rather than biological names. Local language is used in the learning process which are Javanesse and Maduranesse languages which are ethnical residence in Muncar.

The names of the fish can be categorized in three different types which are:

a. The name is the same term in local, Indonesian and Latin name such as lemuru (local), lemuru (Indonesian) and Sardinella lemuru (Latin).

b. The name is the same for local name and Indonesian name such as layang, tongkol, cumi and belanak. These names can also found in other fishing area in Indonesia.

c. The name is different in local, Indonesian and Latin such as mungsing (local), pari (Indonesian) and Mystacoleucus marginatus (Latin).

Muncar nature surrounding environment as fishing area has provide knowledge of fish name for the children. Children learn directly from the fish that caught by fishermen or the fish in the fish market. Fishermen’s children learn from their parents when welcoming their parent from sea. Caught fish become the direct learning media. Children can directly learn about the name of the fish and the different among the fish.

Non fishermen’s children learn from the family and the community. They learn about the name of the fish from daily food consumption. The children also learn it from formal school. With the different types of the names, the school teachers must complement their knowledge with the local names of the fish and provide the right media. This is necessary because the children mostly prior learn the name of the fish from the nature than from formal education in school.

4. Conclusion

Children in Muncar subdistrict Banyuwangi learn the name of fish from daily life activities. The knowledge they get from each other, family and community. The children tend to be familiar with local names rather than biological names. The name of the fish can be categorized as three different terms.
5. References

[1]. Reyes-García V, Pyhälä A, Díaz-Reviriego I, Duda R, Fernández-Llamazares Á, Gallois S, Gueze M, Napitupulu L, 2016, Schooling, Local Knowledge and Working Memory: A Study Among Three Contemporary Hunter-Gatherer Societies, 11(1): 1-18

[2]. Strife S, Downey L, 2009, Childhood Development and Access to Nature: A New Direction for Environmental Inequality Research, Organ Environ. 2009 March, 22(1): 99–122

[3]. Chawla L, 2012, The Importance of Access to Nature for Young Children, Article, Bernard van Leer Foundation: 1-4

[4]. Russell MH, 2014, Connecting Children to Nature in a Montessori Primary Environment, Thesis, Master of Science in Education – Montessori

[5]. Andrejewski R, Mowen AJ, Kerstetter DL, 2011, An Examination of Children’s Outdoor Time, Nature Connection, and Environmental Stewardship, Proceedings of the Northeastern Recreation Research Symposium

[6]. Aliyubi FK, Boesono H, Setiyanto I, 2015, Analisis Perbedaan Hasil Tangkapan Berdasarkan Warna Lampu pada Alat Tangkap Bagan Apung dan Bagan Tancap di Perairan Muncar, Kabupaten Banyuwangi, Journal of Fisheries Resources Utilization Management and Technology 4(2): 93-101

[7]. Pratama MAD, Hapsari TD, Triarso I, 2016, Faktor-Faktor Yang Mempengaruhi Hasil Produksi Unit Penangkapan Purse Seine (Gardan) di Fishing Base PPP Muncar, Banyuwangi, Jawa Timur, Jurnal Saintek Perikanan 11(2): 120-128

[8]. Singer SR, Nielsen NR, Schweingruber HA, 2013, Biology Education Research: Lessons and Future Directions, CBE—Life Sciences Education 12: 129–132

[9]. Zi-hua D, 2015, The Existing Situation and Training about Maritime English Teachers in China, Journal of Shipping and Ocean Engineering 5 (2015): 266-270

[10]. Gallois S, Duda R, 2016, Beyond productivity: The Socio-Cultural Role of Fishing Among the Baka of Southeastern Cameroon, Revue d’ethnoécologie [Online], 10: 1-28

[11]. Diniyah A, 2012, Inventarisasi Jenis Ikan Air Tawar di Bendungan Sampean Baru Kecamatan Tapen Bondowoso Sebagai Media Pembelajaran Biologi di SMA, Skripsi, Program Studi Pendidikan Biologi, Jurusan Pendidikan MIPA, Universitas Jember

[12]. Janurianda FV, 2013, Inventarisasi Ikan Hasiltangkapan Nelayan di Danau Bekat dan Implementasinya Pembuatan Buklet Keanekaragaman Jenis, Artikel Penelitian, Program Studi Pendidikan Biologi, Jurusan Pendidikan MIPA, Universitas Tanjungpura, Pontianak

[13]. Maidika D, Siburian J, Hamidah A, 2016, Studi Jenis Ikan di Pasar Parit 1 Kuala Tungkal sebagai Bahan Buku Ilmiah Populer Biologi SMA, Bioedukasi 9(2): 27-33

[14]. Budiyanto A, 2015, Pengembangan Alat Peraga Sederhana Struktur dan Organ Dalam Ikan Untuk Mempersudah Pembelajaran pada Praktikum Ikhtiolesi Perikanan, Jurnal Kelaatan 8(2): 1-6

[15]. Moedjahedy J, Bokang A, Raranta A, 2017, Aplikasi Pengenalan Ikan Hias Predator Air Tawar Menggunakan Teknologi Augmented Reality Berbasis Android, Cogito Smart Journal 3(1): 91-99

[16]. Dirgayasa IW, 2014, Survey of English Teaching and Learning Process in Maritime Education and Training in Indonesia: A Case Study in Private MET in Indonesia, English Language Teaching 7(7): 111-119

[17]. Akedeiwei ME, Friday MD, Kingsley KA, Odunze CK, Siefere BO, Caiga BT, 2015, Language Difficulties Faced by Nigerian Maritime Students in one Asian University, Asia Pasific Journal of Maritime Education 1(2): 37-41