

THE ROLE OF VOCATIONAL LEARNING ACTIVITIES IN IMPROVING THE VERBAL COMMUNICATION ABILITY OF STUDENTS WITH AUTISM SPECTRUM DISORDER AT SLBN CILEUNYI

Euis Reliyanti Arum^{1*}, Syihabuddin², Dadang Sudana³, Santi Komala Dini⁴

^{1,2,3,4}Universitas Pendidikan Indonesia, Indonesia

Email: euis.reliyanti@upi.edu¹, syihabuddin@upi.edu², dsudana@upi.edu³, syantikkom@upi.edu⁴

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ABSTRACT

Increasing number of autistic people urged special schools in Indonesia to run appropriate programs that support the need of people with ASD. One of SMALB's main programs in building the skills of autistic students whose verbal communication skill is limited is vocational learning program. The objectives of this study were to determine types and role of vocational learning in improving the verbal communication ability of students with ASD. This qualitative study was conducted at public special school (SLBN) in Cileunyi. Data were collected by deep interviews with teachers, observation of the implementation of vocational learning, and study of the vocational learning procedures. Collected data were then analysed using descriptive analysis technique by Miles and Huberman to draw conclusions. SLB provides vocational educations on plant cultivation, animal husbandry, cookery, fashion, cosmetology, simple automotive, and simple Computer Information Technology. In each learning activities, students involved in preparing materials/tools, performing activities, and tidying up the tools. During the implementation of vocational learning their verbal communication is trained in real context. Verbally students are introduced to vocabularies about tools and materials, and procedures to do activities using phrases and sentences. Their interaction and communication skills are trained through discussion and collaboration activities in completing activities. With such learning activities it can be concluded that the vocational learning has played a role in improving the verbal communication ability to interact and communicate of the ASD students.

Keywords: *Autistic Spectrum Disorder, social and communication disorder, vocational learning, verbal communication.*

INTRODUCTION

Autistic Spectrum Disorder (ASD) refers to people experiencing a series of developmental neurological disorders that result in delays in people's development of various abilities and functions including the ability to perform social interaction and communication. Lorna Wing introduced the term of Autistic Spectrum Disorder with its categorization from the most severe to the mildest (Tateno et al., 2011). ASD is also classified by their cognitive ability resulting in High Functional Autism and Low Functional Autism. Taking into account that label should not define a person with ASD, which was previously classified based on their deficit, now ASD is categorized into 3 levels focusing on supports they need from people around them to get better.

Tabel 1. The Classification of ASD by supports they need

Level of ASD	Types of Support	Characteristics
ASD level 1	Requires support: At this level they are very attached to established routines, but they are able to communicate verbally and often interact socially	<p>Tend to have low interest participating in social interaction</p> <p>Experience inflexibility of behaviour</p> <p>Feel anxious or difficult to switch between different activities</p> <p>Challenges with organizing that hampers their independence</p>
ASD level 2	Requires substantial support: They only engage in short conversations and need support in social communication	<p>Hard to performed verbal dan nonverbal social communication</p> <p>Have limited motivation to initiate social interaction and communication</p> <p>respond to social overtures from others abnormally or have no respond</p> <p>Difficult to changing focus</p>
ASD level 3	Requires very substantial support. ASD at this level sometimes does not communicate at all or is very limited.	<p>The characteristics of this level covers the characteristics in levels 1 and 2 more broadly even into the inability to communicate</p> <p>Their social interaction skills do not develop</p> <p>They do certain activities repetitively and restrictively all the time such as rocking, spinning, clapping</p>

However, various research results show that genetic and environmental factors play a role in the emergence of ASD/ASD. Some of the factors that put a person at risk for having Autistic Spectrum Disorder are history of family conditions, male is riskier than female (Demily C, 2017), certain genetic conditions such as down syndrome, fragile X syndrome, and Rett syndrome (KS, 2005), aged mothers and prematurity (Wang C, 2017), and other comorbid disorders that accompany it.

ASD/GSA symptoms can be seen since the child is 2 years old. At that age the child starts showing a unique pattern of ASD behavior with varying severity from mild to severe. People with ASD usually have difficulties in communicating and interacting socially as well as have certain patterns of behavior.

Symptoms of communication and social disorder are:

1. keep away from having eye contact and deficient in face expression
2. Respond to other people's calls slowly or event does not respond
3. Avoid touching and love to play alone
4. Have difficulty in communicating verbally as well as speaking and understanding language
5. Have difficulty communicating non-verbal communication such as interpreting other people's gestures and facial expressions
6. Have sleeping problems
7. Behave aggressively
8. Hard to express emotions and feelings /does not care about other people's feelings
9. Sounds abnormal like a robot

Restricted and repetitive patterns of behavior include:

1. Doing the same movements over and over again such as swaying, turning, and clapping.

2. Having excessive interest in an object or activity
3. Doing self-harm actions such as banging head
4. Being less or very sensitive to sensors such as light or sound
5. Attaching greatly to routine activities and feel disturbed when there is a change
6. Being picky eaters who only eat certain food or refuse food with a certain texture

Deficits in Autism spectrum disorder driving to difficulties in social interaction and communication has impacted many aspects of lives of autistic people. The deficits may affect them psychologically, socially, academically, behaviorally. Furthermore, the deficits also have occupational and vocational impacts (Cummings, 2014). Psychologically and socially, people with ASD have problems in controlling their emotion and empathy, and they tend to be unconfident and do not have many friends because they prefer to play alone. Most people with ASD gain low academic achievement due to their receptive ability problem. It caused them hard to understand the explanation and instruction during the class easily. Besides, they do not willingly initiate a conversation with other resulting in difficulties when they work in a team. The psychological effect relates closely to their hyperactive and aggressive behavior. In some cases, the behavior caused someone with ASD to commit criminals (Howlin P. et al., 2000).

The prevalence of autistic spectrum disorder cases continues to increase. The World Health Organization (WHO) estimates the international prevalence of ASD at 0.76% (Hodges, Fealko, & Soares, 2020). dr. Maria Endang Sumiwi, MPH as Director General of Public Health, at the commemoration of world autism day on 2 April 2022 explained that WHO predicts the prevalence of autistic sufferers in the world today is 1 in 160 children. Meanwhile, in Indonesia, the incidence of autism increases every year, reaching 500 cases per year (Sumiwi, 2022). The relatively high incidence of people with ASD in Indonesia must be the focus of the government's attention and should be addressed immediately.

Since it is a neurodevelopmental disorder, impacts of ASD will affect someone's life forever. However, people with ASD who receive appropriate and qualified early intervention will be able to make major changes in cognitive aspects, communication, and adaptive behavioral skills. Therefore, they can reduce their deficit and improve their ability to live with positive long-term effects (Reichow, Steiner, & Volkmar, 2012).

Indonesian government has very important role in facilitating and providing treatment and intervention for people with ASD. One of the programs is by conducting special education and building special schools for people with special needs.

According to Law of Republic of Indonesia No. 2 in 1989 concerning the National Education System, the definition of the Special School is an educational institution that organizes educational programs for children with disabilities.

Meanwhile, the aims of the special education are stated in the Governmental Regulation No. 72 in 1991 on special education saying that the aims of organizing special education through special schools is to help students who have physical and/or mental disabilities in order to be able develop their attitudes, knowledge and skills as a person as well as community members in establishing relationships reciprocity with the surrounding social, cultural and natural environment as well can develop skills in the world of work or their further education.

Special Schools available in Indonesia are dedicated for blind (SLB A), children who have a hearing impairment or are deaf (SLB B), mentally retarded or individuals with below average intelligence and do not have adaptive abilities so they need to

receive lessons about self-development and socialization (SLB C), those who have deficiencies in their limbs or are called disabled (SLB D), for those whose levels are not in harmony with the existing environment or are commonly referred to as disabled (SLB E), for multiple disabilities or a combination of disabilities (SLB G), and SLB Autis is specifically for those of Autistic Spectrum Disorder (Negara, 1991).

SLB Negeri Cileunyi is a public special school located in Bandung District, West Java-Indonesia. The school covers many disability students who are blind, deaf, diffable, and experiencing mental retardation as well as Autistic Spectrum Disorder. The missions of the school are to instill good characters, provide students with skills to help them live independently, and provide facilities supporting the objectives of special education. The missions are implemented through strategies such as teachers' professionalism, outstanding facilities, coordination, and vocational education programs.

Vocational education at SLB becomes a key program aiming to equip people with disability with vocational skills consisting of various technical knowledge, skills and competences that are required on the market and in their future lives in society. Moreover, vocational education helps students to improve their social, technical, and organizational skills (Felipe Barrera-Osorio, 2020). According to Riani et al., vocational skills are the ability to do or make something so that it can be useful to earn enough income for life (Riyani, Abdurahman, & Tarsidi, 2016).

Vocational skills include hard skills and soft skills. Hard skill is the ability to do and complete a specific task or job practically for example a chef is able to cook and bake food and cake. It relates to what you do. Meanwhile soft skill refers to how you do something. It describes attributes and behavior how someone perform and complete his/her task. As stated in Forbes magazine, Adam in Keith Green (2023) mentioned 10 core soft skills needed by employers which among others are ability to communicate verbally with people inside and outside an organization, ability to obtain and process information, and ability to persuade and influence others. Three points of 10 core soft skills relates closely to interactional ability using verbal communication.

Verbal communication is defined as an oral communication in verbal format to express your thoughts or feelings through spoken words. Verbal communication is oral in nature that encompasses different activities such as speaking, saying, or listening. Good verbal communication is able to maintain successful social interaction and communication. Linguistically, effective verbal communication covers all linguistic aspects of phonology, morphology, syntactic, semantic, and pragmatic (Greene, 2016). Phonology relates to how language sounds are produced and how a phoneme differs meaning. Morphology studies how to construct words through affixation, reduplication, and compounding, while syntactic learn how words are classified into noun, pronoun, verb, adjective, adverb, preposition, conjunction, and interjection. The words then put together systematically into phrases and clauses with their function as subject, verb, object, or adverb. Words, phrases, and clauses conveying meanings both denotative or connotative are known in semantic study. Finally, how words or language are used in a context is studied in pragmatic (English & Marr, 2015).

Autistic students will someday grow up and require the development of vocational skills to achieve financial independence. Thus, vocational education is needed for autistic students. On school scope, vocational education for autistic students is implemented in the form of vocational learning. Learning is a programmatic teacher activity in design instructional to make students learn actively (Dimyati & Mujono, 2006). In autistic vocational learning context, teachers teach autistic students not only

to be active develop production skills that are marketable in the community but also to train them understand language or expressions used in the context. A number of studies have shown that only a small proportion of autistic individuals can work independently or without assistance (Kurniati, 2016). Therefore, it is important that vocational learning is organized by a special school for autism as a form transition program to adulthood.

Judging from its purpose, vocational learning has an impact on economic and social life of students with autism. Persons with disabilities are classified as more vulnerable to poverty in every country (ILO, 2013). Poverty vulnerability magnifies opportunities for increasing unemployment cases for people with disabilities including autism. With vocational learning, students are expected to be able to live independently, especially in terms of economy and their social life in society in the future (Seprinawati & Efendi, 2019). Financial independence of autistic students supported by adequate social and communication skills can encourage self-confidence and giving a positive stigma in society. It can be concluded that vocational learning for autistic students is one of the transitional programs that aims to help autistic people can have meaningful lives as part of public. The purpose of vocational learning for autistic students is develop the potential of students so that students have the ability productive in one skill area as well as have adequate social interaction and communication that will be useful for himself, his family, and public.

Previous research on vocational learning were performed relating to the implementation of vocational learning during Covid-19 pandemic (Alfiyati, 2023) and the implementation of vocational learning on Autistic Spectrum Disorder students in SMK "X" Bandung (Prayogo, 2017). Other research performed to know the implementation of the vocational learning of making batik (Prayogo, 2017), and recognize the supporting and obstacles of performing the vocational learning activities (Rezeika&Wahyuno, 2018)

Based on the explanation, this study aimed to identify vocational learning programs conducted in SLBN Cileunyi and their implementation as well as their roles in improving the verbal communication of autistic students.

METHOD

This study used qualitative method. Data used in this study were primary and secondary data. Primary data in the form of the implementation of the vocational learning activities were obtained through interviews to teachers and direct observations during the implementation of the vocational learning. The secondary data was taken from the documents of school profile and Learning Implementation Plan (RPP) on the vocational learning. Researchers act as key instruments or main data collectors. Researchers involved in collecting data interviews, observations and documentation. Therefore, interview guidelines and observation guidelines were prepared.

This study uses a semi-structured interview technique with one-on-one interview approach with teachers who supervise vocational skills learning. Interviews were conducted to obtain the whole information on the procedure for vocational learning activities. Observations carried out to gather information on the implementation of the vocational learning in a class setting with a real context of the vocational skills.

Documentation activities were performed to collect secondary data as a complement to the primary data obtained through interviews and observations. Both data then were analysed using the Miles, Huberman, & Saldana (2014) technique consisting of (1) Data Condensation, (2) Data Display, and (3) Drawing and Verifying

Conclusions. Researcher condensed field note data, interview transcripts, and documentation regarding the implementation of vocational learning activities conducted at SLB Negeri Cileunyi. Then, the data were displayed in the form of narration and tables. All information regarding the vocational learning procedure for autistic students presented in narrative form which is summarized into a table. Finally, conclusions were drawn based on the information that has been displayed. Conclusions are provisional and can be re-verified later when the researcher returns to the field.

FINDINGS AND DISCUSSION

Vocational learning programs are given to students with ASD as a provision in continuing their higher level of education or their life in a community later after they have graduated from the school. Vocational skill is often referred to a skill associated with a particular field of work found in the community or student environment. Vocational skills are more suitable for students who rely on psychomotor skills than the ability to think scientifically in pursuing work (Ministry of National Education, 2006). Simple vocational skill is a simplification or breaking down into smaller sub-sub-form that is more adapted to abilities and the needs of students. Simplification done so that vocational skills are complex can be reached or absorbed by students with special needs accordingly with the abilities they have (Dewi, 2017).

The vocational program curriculum is a development of the transition program curriculum where the special curriculum for the school transition program to post-school is comprehensive and relevant according to the needs of students with special needs (PKLK Dikdas Directorate, 2015). At SLBN Cileunyi, vocational program curriculum is modified and adapted to the ability of students and school environment. There are six vocational learning programs provided by the SLB, namely plant cultivation/animal husbandry, catering, fashion, cosmetology, simple automotive, and computers.

Vocational learning management in SLBN Cileunyi are divided into three stages; planning, implementation, and evaluation. Prior to the implementation, a meeting was conducted to plan the vocational program, which would be performed in the next semester in coordination among teachers, academic coordinator, and the chief of the SLB with various considerations, both in terms of student interest, student abilities, the potential of the school and teachers, as well as the needs of student and market. Students will have different vocational program in each semester. It means that they may experience all the vocational programs in SLBN Cileunyi. The vocational training is hoped to give much advantages for children as well as for other people. After that, each vocational learning was selected based on several factors such as availability of materials, manufacturing process easiness, availability of facilities (tools and places), and teachers' competency. Teachers are responsible for discussing and preparing procedures and ingredients or materials or tools to use during the vocational learning.

The learning model is in the form of a model direct learning or so-called direct instruction, which aims to help students learn the basic language skills and activities that taught step-by-step. This method is in line with Sukinah's opinion (2017) explaining that a method that meets the characteristics of autistic students is the instructional method (Discrete Trial Training) DTT consisting the steps of; a) breaking down skills into small parts, b) training one sub skill until completely mastered by children, c) practicing it in a repeated manner at a certain time period, d) providing teacher's assistance as much as needed, and e) using reinforcement procedures.

Part of the activities related to the efforts in improving the verbal communication activities of the autistic students can be seen from the way the teachers deliver the information to the students.

Firstly, prior to the learning activities teachers prepare tools and materials needed in the learning activities and write all the vocabularies or name of the materials down on the whiteboard in the form of words and phrases.

Then, the instruction of the procedures is delivered in the form of simple clauses such as “the fruits are washed”. Each word, phrases, and clauses are repeated.

Table 2. Samples of words, phrases and clauses used during the vocational learning activities

No	Vocational Learning	Words	Phrases	Clauses
1	Cookery	mangga, telur, terigu, agar-agar panci, kompor, pisau, cuci, potong, masak, makan kemudian, setelah itu, sebelumnya	Buah manga, piring kecil, satu gram, setengah sendok	“Buah dipotong kotak.” “Masukan terigu ke dalam mangkok” “Aduk pelan. Kemudian tuang agar-agar ke dalam cetakan.”
2	Fashion	gunting, pola, kain, baju, celana,	baju tangan panjang, celana pendek,	“Kain disimpan di atas meja.”
3	Plant cultivation/ animal husbandry	Tanaman, bunga, bibit, ikan, pupuk, benih	Ikan mas, pupuk organik,	Kain merah ini Panjang. Jadi, kain ini harus dipotong.
4	Simple Computer Information Technology	Laptop, keyboard, <i>software</i> , program <i>Searching</i> <i>Googling</i> tekan	Laptop canggih, program komputer, Microsoft word, File/dokumen	“Tekan tombol enter” “Kita buat folder.”
5	Simple automotive	Mobil, motor, roda, mesin, Mencuci, membuka, membersihkan	Mobil merah, Sangat bersih	Mobil itu kotor. Motornya rusak dan harus diperbaiki.

Table 1. shows us the examples of expressions used during the vocational learning in the form of words, phrases, and clauses. Most of the expressions are simple so that the students will understand and repeat the expression easily. Besides, words uttered by teachers vary in world classes and used in appropriate context.

CONCLUSION

The main objective of organizing special education through special schools, as stated in the government regulation, is to help students who have physical and/or mental disabilities develop their attitudes, knowledge and skills as a person as well as community members in establishing reciprocal relationships with the social, cultural and natural environment as well to develop skills needed in the work places or their further education. The skills needed by autistic students whose characteristics is unique related to their social interaction and communication should not only improve their vocational skills but also should be able improve their deficit in their social interaction and communication. According to the results of the observation on the implementation of vocational learning activities and interviews with teachers, during the learning process teachers, while explaining and doing the project they also apply the verbal communication through the use of words in various classes, phrases, and clauses.

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