Life Skills Education for Children with Special Needs in order to Facilitate Vocational Skills

To cite this article: Hendra Jaya et al 2018 J. Phys.: Conf. Ser. 1028 012078

View the article online for updates and enhancements.

Related content
- Developing Science Process Skill Based Learning in Science for Children with Special Needs Course
  Abdul Hadis and Nurhayati B.
- Science with handicapped pupils
  A V Jones, Jill Lynn, Anne Topping et al.
- Papers from the Fifth International Brain–Computer Interface Meeting
  Jane E Huggins and Jonathan R Wolpaw
Life Skills Education for Children with Special Needs in order to Facilitate Vocational Skills

Hendra Jaya*, Sapto Haryoko, Saharuddin, Sutarsi Suhaeb, Sabran, and Mantasia
Department of Electronics Education Engineering, Universitas Negeri Makassar, Makassar, 90222, Indonesia
hendra070982@gmail.com

Abstract. Life skill skills for students with special needs are very important and valuable for them to get in education. This skills education program is a part of life skill. With this provision is expected they will be able to live independently by not / less dependent on others. This skill training focuses on the various skills to produce a product in the form of real objects that are beneficial to life. By learning the various skills expected, children with special needs can gain a perceptual experience, appreciative experience, and creative experience. Children with disabilities include blind children, hearing impaired, mentally disabled, tuna barrel, gifted child, and children with specific learning difficulties. Seeing the disorder they have a very varied intelligence, so there are children who have a high cognitive disabilities, but also have a low cognitive. Some have a severe disability and some are mild. Seeing this condition the kind of life skills that are suitable to be developed are general life skills and vocational life skills for children with disabilities. There are Types of life skills education for children with disabilities, severe disability and other disabilities children who have less developed intelligence life skills education in general life skills and vocational life skills. While blind children, deaf, deaf, and tuna barrel, gifted children and children with specific learning difficulties developed general life skills, academic life skill, and vocational life skills. Through the help of learning media can help children with special needs in understanding the content of the lessons and facilitating vocational skills.

1. Introduction
In Indonesia, every citizen has the same opportunity to obtain education (the 1945 Constitution article 31, paragraph 1), as well as in the National Education System Act No. 20 of 2003 the eleventh section of Article 32 states the obligation of the government to organize Special Education, for learners who have difficulty level in following the learning process because of physical, emotional, mental, social, and / or have potential of special intelligence and talent. This shows that children with disabilities (children with special needs) are also entitled to have equal opportunities with other children (normal children) in education. The application of inclusive education has a strong fiosofis, juridical, pedagogical and empirical foundation. In the Law Number 20 Year 2003 also states that the implementation of education for children with special needs or have extraordinary intelligence held inclusively or in the form of special schools in this case SLB. Children with special needs usually attend special schools (SLB) in accordance with their specificity. SLB section A for the visually...
impaired, SLB part B for the hearing impaired, SLB part C for Learning Disabilities, SLB part D for Physical Impairments, SLB section E for emotional disabilities and SLB section G for double defects.

Children with special needs generally consist of children who experience delays and disruptions in their development so that require special handling to improve the ability of children with special needs. After conducting a survey at several extraordinary schools (SLB) in Makassar, it was found that the conventional delivery of materials from teachers resulted in an uncomfortable situation so that the students 'interest to learn a particular subject was very low, therefore a learning method was needed that could attract students' interest in following the lesson. Though children with special needs also have the potential of extraordinary knowledge [1]. One of their potentials is vocational skills. This is seen in the SLB Negeri Pembina Tk.1 South Sulawesi Province PKPLK centers (as partners), managing vocational education within the school. Therefore, the author tries to provide solutions by making learning tools based on ICT and Multimedia that aims for learning and training, is expected to increase the interest of SLB students on school subject matter and can facilitate vocational skills.

Skill education services include all learners, not to mention deaf children who are children with special needs. Life skills provided are academic and non academic. In accordance with the objectives of the existing education system in Indonesia that requires students not only have academic ability, but also non-academic skills in the form of support skills to be able to compete in the labor market. Limited ability of children with special needs in capturing information. This limitation should be developed by providing skills appropriate to the talents and interests and needs in the community, so that despite the limitations of children with special needs can still compete with other children in general later when it has returned to the community or enter the workforce.

Skill is a picture of a person's level of skill in mastering a certain motor movement or adherence in performing a task. [2] A person is said to have the skills if he has mastered a certain task, so able to do it independently with good results. Life skills education program is a program to explore the potential while developing the ability owned by students, especially in the field of non-academic, because by having life skills learners are expected to have provisions to achieve a better standard of living. So also according to Anwar [3] life skills education program is education that can provide skills that practical, used, related to the needs of the job market, business opportunities and economic potential or industry in the community.

The life skills associated with certain occupations in the community are referred to as vocational skills or vocational skills [4]. The special nature of the skill is that this skill can be enhanced perfectly through practice or practice. The condition is the repetition of basic movements accompanied by feedback from the environment [5]. Vocational skills will be more quickly accepted by the child when given a repetitive training, so that children will be accustomed even though less theoretically understood but mastered in practice. thereby it can be concluded that skills education is a special ability that is held so that students have skills (skills) that are useful for himself as the provision of his life in society.

Life skills as a continuum of knowledge and skills is needed by an individual to function independently in life [3] [6]. Another opinion says that life skills are skills required daily by a person to be successful in running life. Life skill [7] is defined "as abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life". Life skills also mean as the ability to adapt and to have positive behavior that enable a person to face all the demands and challenges in his life. In addition, lifeskill is also viewed as a skill that one has to be willing and courageous to face the problems of life and living naturally without feeling pressured, then proactively and creatively search for and find a solution so that ultimately he may be able to overcome the problems [8].

From some opinions above, it can be concluded that the life skills is the ability of learners to adjust attitudes and behaviors that allow him to overcome various problems of everyday life. Life skills are often associated with the acquisition of various competencies in preparation of students for life in the community. Competence actually has a very broad sense as it covers all skills and habits that are needed by someone in his life, both as personal and working life, as well as community
members. Competence has a similar meaning to the skills / life skills, i.e. abilities, skills to express, preserve, maintain, and develop themselves [9].

The concept of life skills as mandated in UUSPN No. 20 in 2003 and PP 19 in 2005, and which have been developed previously can be illustrated in Figure 1. From Figure 1, it appears that life skills can be divided into two main types, namely: (1) generic life skills (GLS), and (2) specific life skills (SLS). Each type of skill can be divided into several sub-skills. Generic life skills consist of personal skills and social skills. Personal skills include proficiency in understanding oneself (self awareness skills) and thinking skills. Proficiency to know ourselves basically is an appreciation of ourselves as creatures of God Almighty, as a member of society and citizens, as well as to realize and appreciate the strength and limitation that can be used as an asset in improving ourselves as individuals that are beneficial to the environment. Proficiency thinking skills include the skills to identify and find the information, process, and make decisions, and solve problems creatively. Finally, the social skills include communication skills and proficiency in collaboration (collaboration skills).

![Figure 1](image-url)

**Figure 1.** The concept of life skills [10]

Life skills are skills specific to face the job or certain circumstances. This skill consists of academic skills or intellectual skills, and vocational skills. Academic skills associated with occupations that require more thought or intellectual work. Vocational skills associated with occupations that require more motor skills. Vocational skills are divided into basic vocational skills and specific vocational skills (occupational skills) [10].

2. **Types of Disability**

The word disability indicates human limitation of one kind or other, in performing various tasks performed by other human being in general. It may be one or more of the kind of physical, mental or sensory one including visual and hearing. Generally people with disability automatically become underprivileged, because they may not have proper access to the recourses, accessible otherwise. Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments, which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others [11].

Disability as shown in figure 1, is generally seen as one or more of the types as given below: Vision Impairments: The term “vision impairment” is used to describe many degrees of vision loss, such as low vision, legally blind, and totally blind.
2.1 Hearing Impairments
Hearing impairments vary greatly from mild hearing loss to deep deafness. The term “hard-of-hearing” describes those who have mild to moderate hearing loss. People with hearing impairments are generally dependent on visual cues for communication.

Physical Impairments: The term “Physical impairments” is used to describe numerous disabling conditions which affect movement and functioning of limbs. Physical impairment includes cerebral palsy, loss of limbs, arthritis etc.

2.2 Cognitive Impairments
It is used to describe those conditions that affect, or appear to affect, the mental and/or physical development of individuals. Also it is known as “developmental disability” and includes mental retardation, cerebral palsy, autism epilepsy, and learning disability. A learning disability, as defined by the National Center for Learning Disabilities [12] is “a neurological disorder that interferes with a person’s ability to store, process, or produce information, and creates a “gap” between one’s ability and performance. Dyslexia is one example of a learning disability. The characteristics of dyslexia may include severe difficulty in remembering a printed word or symbol, improper letter sequencing or reversal of letters, unusual spelling errors, and illegible handwriting. Individuals with learning disabilities can learn; however, they need to be taught in a variety of ways that allows them to use their abilities to compensate for their weaknesses. This is one reason why it is important to incorporate hands-on activities including computer game and simulated learning environment using ICT.

3. Management Learning Life Skills For Various Types Of Children With Special Needs To Facilitate Vocational Skills
Life skills can be divided into two main types according to the Ministry of National Education [4], namely generic life skill and specific life skill. Generic life skills include personal skills and social skills, while specific life skills include academic skills skills and vocational skills. All of these living
skill services programs are a must-have capability a learner to become a person who has the ability and competitiveness that will grow into a useful human being for the nation and state For Life Skills.

3.1 Life Skills for Deaf Children

The life skills associated with a particular field of work in the community are referred to as vocational skills or vocational skills [4]. By having vocational skills one is expected to meet the needs of his own life, so as to become an independent person and do not depend on the environment. The vocational skills services provided for the deaf children should adjust the talents, interests and needs of the job market. In the implementation should start with simple and concrete things, so in the implementation practice is directly preferred. It is important to adjust to the condition of individual disorders [13].

This is related to the ability of children with hearing impairment to capture information, ie by prioritizing visual or vision, so that in practice the practice is directly preferred, so that learners are able to understand the given vocational skills while reducing the possibility of misperceptions that may occur during the learning given. Deaf children according to [4] are individuals or children who experience loss of listening ability, either loss of hearing ability at all or loss of partial hearing ability. So that causes children difficulty in learning to speak, communicate, personality development, and social and emotional.

Deaf children are not physically impeded so many skills can be given, The success of the training is appropriate because the deaf children prefer the visual ability in obtaining information, this is in accordance with the statement of Kasijan, Zulmiyetri, and [4] that the method of practice with the process skill approach will give a true picture to the deaf children in introducing an ability. Direct observation will give the most intact and meaningful impression of an information.

3.2 Life Skills for Mentally Disabled Children

Life skill skills for students with special needs are very important and valuable for them to get in education. This skills education program is part of the skills training life (life skill) for them. With this provision is expected they will be able to live independently by not / less dependent on others. This skill training focuses on the various skills to produce a product in the form of real objects that are beneficial to life. By learning the various skills expected, children with special needs can gain a perceptual experience, appreciative experience, and creative experience. The various skills given to children with special needs skill workshop are expected to be provisions so that they can be economically productive later. For the success of this program would require cooperation from various parties such as family (parents), teachers, and society as a whole.

During the process of learning life skill skills for tunagrahita students, it also uses training methods, demonstration methods and direct practice methods. In the life skill learning activities (life skill) in the culinary skills room, in funding is not found obstacles encountered. In the learning process is also not found obstacles encountered, because the program is tailored to the ability of students and talents of interest students. As we know the tunagrahita (Mentally Disabled) students have limited ability but if they are given the exercises during the teaching and learning process they will be able to obtain a science that will be a provision in supporting their lives will come. This is in agreement with [14] states that children with light disabilities can be educated into labor.

SLB teacher aspirations about "life skills" [15]: 1) There needs to be a common understanding of competency-based curriculum and life skills-based education in teachers of Special Schools in Indonesia; 2) Implementation of life skills based education does not need to change the curriculum but is developed and modified to fit the life skills orientation. Thus the implementation can be attached to certain subjects such as IPA, IPS, Economics to develop personal skills from social or general life skills, skill lessons through specific life skill; 3) learning is directed to life skills, oriented between knowledge and skills to develop independence. graduates are expected to have certain skills; 4) the implementation of learning carried out individually or classically see the condition of the object; 5) In
the implementation of life skill education there are 4 stages that need to be done by the School is extraordinary: (a) self service; (b) Social Skills; (c) Academic Skills; (d) Vocational Skills; 6) students are expected to be self-serving, confident, skilled to connect with others, have academic knowledge and skills to occupy a certain position or occupation; 7) before the teaching and learning activities need to be done in written or recorded, which can be read by other teachers. there should be an observation class; 8) teachers (SLB Teachers) are selected according to their needs and areas of ability; 9) schools are given the opportunity to be independent; 10) Implementation of life skills need cooperation with parents; 11) type of vocational skills according to the talent possessed by the child; 12) the curriculum content for D is the same as the curriculum applicable in public schools. For D1 the curriculum is 60% skill and 40% theory. Curriculum for D1 does not yet exist because it needs to be made curriculum according to children condition D1. For children with levels D1, C1, can not produce a product.

Figure 3. Distribution of life skills for children with special needs [15]

Children with disabilities include blind children, hearing impaired, mentally disabled, disabled, tuna barrel, gifted child, and children with specific learning difficulties. Seeing the disorder they have a very varied intelligence. so there are children who have a high cognitive disabilities, but also have a low cognitive. Some have a severe disability and some are mild. Seeing this condition the kind of life skills that are suitable to be developed are general life skills and vocational life skills for children with disabilities, severe malnutrition, (D1), and children with disabilities who lack intelligence. Children with disabilities who have high intelligence developed general life skill and academic life skills, and vocational life skills.
Table 1. Life Skills Assessment in measuring the practical of Students with Disability

<table>
<thead>
<tr>
<th>Student Practical Ability</th>
<th>INDICATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Skills</strong></td>
<td>Know the limitation and ability</td>
</tr>
<tr>
<td></td>
<td>Mastery</td>
</tr>
<tr>
<td></td>
<td>Understanding</td>
</tr>
<tr>
<td></td>
<td>Usage</td>
</tr>
<tr>
<td></td>
<td>Discipline</td>
</tr>
<tr>
<td></td>
<td>Improvement of individual ability</td>
</tr>
<tr>
<td></td>
<td>Skilled</td>
</tr>
<tr>
<td></td>
<td>Adaptation</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur Spirit</td>
</tr>
<tr>
<td><strong>Thinking Skills</strong></td>
<td>Understand information</td>
</tr>
<tr>
<td></td>
<td>Understand Problems</td>
</tr>
<tr>
<td></td>
<td>Make Decision</td>
</tr>
<tr>
<td></td>
<td>Process information</td>
</tr>
<tr>
<td></td>
<td>Acquire information</td>
</tr>
<tr>
<td></td>
<td>Solve problems creatively</td>
</tr>
<tr>
<td><strong>Social Skills</strong></td>
<td>Analytic</td>
</tr>
<tr>
<td></td>
<td>Adaptation</td>
</tr>
<tr>
<td></td>
<td>Emphaty</td>
</tr>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td></td>
<td>Team Work</td>
</tr>
<tr>
<td></td>
<td>Communicative</td>
</tr>
<tr>
<td><strong>Vocational Skills</strong></td>
<td>Skilled</td>
</tr>
<tr>
<td></td>
<td>Reflects</td>
</tr>
<tr>
<td></td>
<td>Limitation/strength</td>
</tr>
<tr>
<td></td>
<td>Self-motivation</td>
</tr>
<tr>
<td></td>
<td>Cooperation</td>
</tr>
<tr>
<td></td>
<td>Future Orientation</td>
</tr>
</tbody>
</table>

4. Enhance Vocational Skills From Learning Based Media

The use of media should be tailored to the characteristics of children especially for children with special needs definitely require a special device as well, one effective method used is through a constructivist approach [16]. Digital media intended for blind children is of course different from the media used for hearing impaired, as well as for other children with special needs. Media as a teaching tool that also influences climate, condition and learning environment arranged and created by PLB teachers. One example of media that can be used for the blind is screen reader software, to convert text into sound, while for the hearing impaired can utilize video for learning media. The problems that arise in extraordinary education are: a) the absence of integrated tools with visual and audio elements in learning that are able to understand the characteristics of ABK and have not facilitated vocational learning in SLB; b) SLB graduates do not have the attitude of independence when plunged into the community.

Children with Special Needs (ABK) have different characteristics between one another. Due to the characteristics and constraints it has, ABK requires a special form of educational service tailored to their abilities and potential. Specially targeted children usually attend special schools (SLB) in accordance with their specificity. SLB section A for the visually impaired, SLB part B for the hearing impaired, SLB part C for tunagrahita, SLB part D for tunadaksa, SLB section E for tunalaras and SLB section G for double defects.

The use of technology in learning increases, not only as a tool for learning, but also as a medium of presentation [17]. Then the presentation media can be used to deliver the material to the child's
hearing impaired according to his learning style. Live and Lepts suggests visual media functions such as (1) attention function, which attracts students' attention to concentrate on the content of the lesson; (2) the function of affection, which is to create student feelings of pleasure; and (3) the function of cognition, ie the tools of understanding and remembering information.

The existence of variations in the specificity of Polloway & Patton [18] suggests that education services for ABK are tailored to the needs of the child. If the school is unable to provide services throughout the child's needs program, it must cooperate with other institutions but it is still the responsibility of the school where ABK is registered as a student. Thus education for children with special needs (ABK) in regular schools and special schools (SLB), essentially to help children develop their potential. The purpose of learning these skills to equip ABK in order to have a useful post-school work skills.

![Figure 4. Multimedia and ICT For Disability Childrenen [19]](image-url)

Thus the urgency of using media as a tool for children with special needs are: 1) Creation of an IT-based multimedia learning tool that can facilitate learning process and vocational skills of children with special needs (ABK); 2) With the existence of multimedia-based learning tools and Information Technology it is expected that the delivery of material in children with special needs (ABK) is more easily accepted than the delivery by using books and props; 3) With the existence of this interactive multimedia applications acceptance of the material will be more easily captured, because the material has an explanation through animated images are packaged in an interesting, multimedia applications are designed with the concept of user friendly, and ease the burden of teachers in providing learning materials; 4) Multimedia-based learning media and IT is used as learning, especially on learners with
special needs, and is expected with this learning media can improve the quality and quality of education and improve vocational skills in School Extraordinary.

5. Conclusion
Types of life skills education for children with disabilities, severe disability and other disabilities children who have less developed intelligence life skills education in general life skills and vocational life skills. While blind children, deaf, deaf, and tuna barrel, gifted children and children with specific learning difficulties developed general life skills, academic life skill, and vocational life skills. Through the help of learning media can help children with special needs in understanding the content of the lessons and facilitating vocational skills.

References
[1] (www.bpdiksus.org)
[8] Tim Broad Based Education Departemen Pendidikan Nasional 2002 Pendidikan berorientasi kecakapan hidup (life skill) melalui pendekatan pendidikan berbasis luas broad based education (BBE)
[11] MP Mishra ICT as a Tool for Teaching and Learning in Respect of Learner with Disability School of Computer and Information Sciences