



REVIEW ARTICLE

ILLITERACY ERADICATION ON STREET CHILDREN BY ANDROID-BASED GRADUAL FUNCTIONAL LITERACY PROGRAM IN SEMANGGI AREA, SURAKARTA CITY

\*Aninditya Sri Nugraheni, Siti Zubaedah and Lailatu Rohmah

Lecturers of Tarbiyah Science and Teacher's Training Faculty, State Islamic University Sunan Kalijaga Yogyakarta

ARTICLE INFO

Article History:

Received 12<sup>th</sup> January, 2017  
Received in revised form  
06<sup>th</sup> February, 2017  
Accepted 22<sup>nd</sup> March, 2017  
Published online 30<sup>th</sup> April, 2017

Key words:

Illiterate, Functional literacy, Android.

ABSTRACT

Education problem on street children and illiteracy eradication are the world's problem. This research is aimed to know and observe effectiveness of android media use to eradicate illiteracy for street children in Semanggi Area, Surakarta City. This research is a research which utilizes descriptive method. The research method utilized are observation, interview, and document review of qualitative descriptive analysis. Result of the research which is resulted is that learning method of Android-based gradual functional literacy that can give effective learning activity to improve school residents' understanding, enable instructors in providing and bringing media which can effectively improve school residents' interest towards learning media utilized in Functional Literacy Learning.

Copyright©2017, Aninditya Sri Nugraheni. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Aninditya Sri Nugraheni, 2017. "Illiteracy eradication on street children by Android-based gradual functional literacy program in Semanggi area, Surakarta city", *International Journal of Current Research*, 9, (04), 49599-49606.

INTRODUCTION

National Education System Act has explained clearly about education. One of primary things within is that each citizen has equal rights to get qualified education. Article 31 Paragraph 1 mentions that "Each citizen deserves to obtain education". It is continued with Article 31 Paragraph 2 which mentions that "Each citizen is required to join basic education and the government is compulsory to pay it." It becomes the our basis of reference in education world. Therefore, in education area, it should not ignore poor people or wealthy people deserve to get education. Literacy education is one of nonformal education. It is one of national priority which is targeted to decrease illiterate adult numbers. The main objective of Functional Literacy education is to teach school residents to use their basic skills such as reading, writing and calculating and functional competence in daily life. Literacy education is an education for people who are illiterate, both children or street children. Literacy education is not only a responsibility of certain institution or department, but also all societies. Of the various parties who have role in illiteracy eradication, most of them are successful and the others fail in eradicating illiteracy. Society's role and participation of illiterate people are required. If they are not, it will cause a failure. Semanggi is one of areas inhabited by street children in Surakarta city. Many children who suppose to play and study at school must

sing and beg on the street. It is very terrible phenomena. Semanggi is a city which is known as education world, but there are still many street children who have not got their rights to study at school. However, problems within the society are very tight, these illiterate street children should be eradicated because it is the government's duty in implementing Article 31 Paragraph 2 of Act that have been mentioned previously. One of methods that can be done are by implementing literacy education which is planned with mature plan such as implementing literacy learning methods and medias utilized. It is expected that the society becomes spiritfull and motivated to participate in the literacy program in order to develop the human research towards better direction. Android media is selected and seen as an interesting media for street children. Recognizing that multimedia based computer technology has reached all cellular phone products which are furthermore known as smartphone. If it is compared to computer, gadget is cheaper and interested by children. It is which is owned by the society is generally Android based, an Operating System owned by Google Inc which adopts Java programming language in its coding. This OS is sold for free and open source so that it is able developed without buying the license. Therefore, gadget with OS Android is generally cheaper compared to OS iOs owned by Apple Inc.

Based on the problems of illiteracy eradication, the author is interested to review it in a research entitled Illiteracy Eradication on Street Children by Android-based Gradual Functional Literacy Program in Semanggi Area, Surakarta City

\*Corresponding author: Aninditya Sri Nugraheni, Siti Zubaedah, Lailatu Rohmah  
Lecturers of Tarbiyah Science and Teacher's Training Faculty, State Islamic University SunanKalijaga, Yogyakarta

## Theoretical review

### The Definition of Education and Street Children

Competitive society in 21<sup>st</sup> Century is a product of steady and tough national education development system. National education is a part of national development, through Act number 2 Year 1989, it is said that the objective of education is: "To education the nation's life and develop Indonesian individual as a whole, who are faithful and cautious individual towards The One Almighty God and virtuous, have knowledge and skill, physical and spiritual health, steady and independent personality and sense of social and national responsibility. Therefore, national education has owned a strong base. However, national education as a system is not patent, but a process which is continuously find and perfect the shape." National education problem becomes more complex as the increasing society's awareness and the Human Resource competence. Of the education problems types, HAR Tilaar writes four education problems, such as:

1. Education role in national development in entering the 21st century in the open-minded society must emphasize on education reformation.
2. The importance of education management so that the national education system development is strong and dynamic towards high output quality.
3. Information and technology development which influence the education process in the society (Knowledge Society).
4. Local autonomy which demands national education development which fulfill local development needs as the basis of national development in regional cooperation.

Therefore, education world should develop as the present era development which grows rapidly. Education should be based on needs of Indonesian society. Eventhough the general definition of education can be defined, if it is defined in certain border, there are some kinds of simple understanding. Education can be defined as human's effort to build concerns as the values in the society and culture. In another definition in general is as conscious effort done by an educator through a guidance, teaching, and practice to help learners in experiencing self-humanization towards morally mature personality. The word of education contains at least of four definitions, which are activity form, process, result or product resulted by the process and science. Elements which can be found in education are: (1) guided or assisted effort (activity); (2) there is education, or adviser or helper; (3) there are educated people; (4) the guidance has basic and aim; and (5) certainly, there should be required tools in the effort. A part of society's group that experience social phenomenon, who deserve a job and decent livelihood for humanity. Street children are they who are considered as unlucky and displaced, waiting for an effort of all parties so that they are able to develop normally. Street children are they who spent some of their time to find livelihood and hang around on the street and other public places. They who live outside their home are a part of community or a group of society that have problems, spend most of their time on the street to look for livelihood for daily needs.

### Street Children in Semanggi Area

The number of street children in 2010 is predicted to experience increase. For 2009, Agency of Social, Manpower

and Transmigration (Dinsosnakertrans) of Solo notes 648 children, consisting ignored, naughty and street children are spreaded in Solo. The head of Dinsosnakertrans, SinggihYudoko acknowledges that his party has not made direct data collection. However, the tendency of number increase is seen from rude observation performed by his staffs in spots that become the existence of street children. According to Singgih, it requires solution which involves all relevant communities to overcome the problem. Particularly, cross area coordination, at least in Soloraya scope. Meanwhile, illiteracy is also related to poverty, retardation, ignorance, and powerlessness of society. Therefore, this illiteracy problem does not only become national but also international problem. Thus, UNESCO, UNICEF, WHO, World Bank and other international agencies become very vigorous in campaigning and socializing the importance of illiteracy eradication in the world, including Indonesia.

### Urgency of Illiteracy Eradication

Illiteracy is a method to see the world. It means that if an individual is able to read, he/she is able to see the new world and all its development, including knowledge and technology science and Information technology (IT). Being illiterate is not only an inability to read and write, it has potential to cause a set of very large impact. The success of illiteracy eradication can increase index or quality of human development. On the other hand, the failure of illiteracy eradication will cause negative impact, it is not only on human development index decrease, but also development obstacle for another sector. The number of illiterate people are increasing because it is found that many Elementary School-aged learners do not go to school. It becomes the additional contributor of illiteracy numbers in Indonesia. According to research done by UNESCO, if the elementary school learners stop going to school, especially when they are in the 1<sup>st</sup> grade to 3<sup>rd</sup> as a result they do not use their literacy skill in four years and become illiterate. There are also many Indonesian children who have not have opportunity to join school because their parents or family are unable. This condition forces parents to employ their children so that they obtain additional income for the family. Indonesia can be said as a country which can quickly eradicate illiteracy. Even, it is acknowledged by world organizations such as UNESCO, UNICEF, and WHO. It becomes Indonesian administration's achievement. Therefore, each year the government has their own target to eradicate illiteracy.

The causes of Illiteracy in Indonesia:

Factors which make an individual to be illiterate, among them are:

#### 1. Poverty

It is the main factor which makes an individual to be illiterate because they find difficulty to fulfill their daily needs, moreover to pay tuition.

#### 2. Far from educational service

Far educational service also becomes an individual to be illiterate, for instance in remote area or hinterland which is far from Elementary School, especially Senior High School.

### 3. Parents presume that school is not important

Parents presume that going to school is useless action, not important and it is better to let their children help them to be a beggar or street singer. Illiteracy can be solved by various ways, among them are by reducing the number of uneducated street children and making new and fun ways so that learners do not get bored to study and keep their literacy ability for them. The importance of various parties' involvement in the attempt to accelerate the illiteracy education. Socialization of literacy education program towards general society, especially rural communities so that the numbers of illiterate people are decreased through various media. Preparing, providing, and improving the capacity of functional literacy education implementation such as employment, both practitioner or tutor, improve the intensive or welfare for practitioners, tutors, and administrators of other functional education literacy, providing education literacy facility. Improving basic education performance for school age children, community based management on functional literacy education, including planning, implementation, monitoring and evaluation. Effectively, participatively, and thematically implementing learning process for adult (and ragogy), making partnership with stakeholders such as cooperation with universities through various activities, among them are continuous Religious Ministry, especially on eradication and guiding phase. Using the comprehensive strategy, illiteracy will be illiteracy problem can be eradicated in this country. Many obstacles faced to eradicate illiteracy. The obstacles are the limitation of learners in Indonesian language so that the learning process is hampered, learners who are less active and still shy in joining the learning. Besides, there are learners' friends who do not go to school. Therefore, those influence the learner to join the program.

## DISCUSSION

### Media utilized in eradicating illiteracy all of this time

Learning material presented using learning media is more effective than is not. A learning without learning media is less effective because tutors only give discourse, as a result, learners are lazy to join the class. A lesson taught by tutors become monotonous.

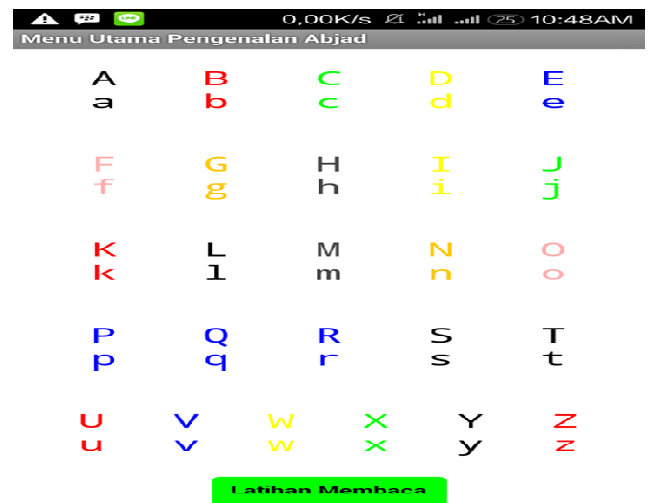
#### 1. The Effectiveness of Learning Media

There are some criteria to measure an effectiveness of a media. Here, learning media is divided into two, which are:

**a. Conventional Media:** Cost, supporting facility availability, appropriateness with class size, brevity, ability to change, preparation time and effort, cause raised, complexity and use.

**b. Interactive multimedia media:** Navigation easiness is a program that should be designed as simple as possible so that the language learners do not require to previously study how to use computer. Knowledge and information presentation. Both criteria are used to measure the content of program itself, whether it has fulfilled the requirements of learners or not. Media integration in which the media should integrate language aspect and skill that should be learnt, aesthetic should attract learners' interest, and the program should have artistic performance thus aesthetic is a criteria. The whole function is that the program which is developed should give learning

wanted by the learners or learners. Therefore, at the time an individual finishes in implementing a program, he/she feels that he/she has learnt something.



### 2. Instrument of Learning Media Effectiveness

Learning media that will be emphasized in this instrument is *Android*. Media is functioned to teach a concept or understanding of letters.

Instruments below are directed to determine the media effectiveness

No	Statement	Scale				
		VA	A	H	D	VD
1	The media content is appropriate with the learning objective.					
2	The learning media which is utilized is easy to operate.					
3	Learning media is able to understand abstract or concrete things.					
4	Media improves motivation to study.					
5	Media performance is like a real things and can be moved as the original thing.					
6	Media which is utilized help in understanding the concept correctly.					
7	Media which is utilized can help to relate between the concept and reality (contextual).					
8	Learning media which is utilized helps in the learning practice implementation correctly.					
9	Media which is utilized builds new desire and interest.					
10	Media which is utilized gives a meaningful learning experience.					

Note: VA (Very Agree) score 5, A (Agree) score 4, H (Hesitate) score 3, D (Disagree) score 2, VD (Very Disagree) score 1.

Score Conversion :36-50 is included in high category, 26-35 is included in average category, 10-25 is included in low category.

### The Development of Functional Literacy Learning Media

#### 1. Criteria of Functional Literacy Learning Media

Criteria is known as the term *7-M*, which are

1. Easy which means easy to make, get the material and equipments and use.
2. Affordable, which means low cost or even no cost learning media that can be used.

3. Interesting, which means interesting or raise learners' attention, both in shape, color, numbers, material or content.
4. Encourage, which means to encourage learners to behave or act positively, both for themselves or environment as the intended objectives.
5. Sophisticated, which means on-time, update, and as the requirements and local potential in the learning place.
6. Benefit, which means valuable content which contains of benefits and unredundant, moreover destroys.

Steps of arrangement and development of functional literacy learning media refer to those criteria. As an outline or in general, the process of arrangement and development of functional literacy learning media cover steps done as in Table 2.

No.	Steps	Output
1.	Identification of learners' studying requirements.	Data on learners' studying requirements (learning participants)
2.	Determination of learners' studying requirements priorities.	Priority list.
3.	Learning program design (Curriculum)	Learning Curriculum design
4.	Topic Determination	Topic for arrangement and development of learning media.
5.	The determination of type or group of learning media.	Type/Group of learning media.
6.	Required content and material organizing.	Spesification of required content and material
7.	The arrangement and deveopment of learning media draft.	learning media draft.
8.	Trial instrument arrangement of learning media draft	Trial instrument of learning media draft
9.	Learning media draft trial	Input (data) for revision
10.	Learning media draft revision	Learning media that has been tested and ready for production.
11.	Learning media production.	Learning media that has been produced.
12.	Distribution and learning media use on learning group.	Learning media that has been ready to be used.
13.	Learning media evaluation	Input for revision
14.	Learning media revision (if required)	Learning media that has been revised.

Source: National Education Department (1989/1990)

## 1. Android media on Functional Literacy learning

Learning media which is utilized in this research is android media. Android a Linux-based operation system which is included in open source operation system designed for touch screen celuller ware for example smartphone and tablet. What is intended with open system operation of open source is an operation system with open source which enables users to develop openly. It gives a big opportunity for application developers and makers. In the beginning, Android is developed by Android Inc. In 2007, it islaunchedofficially. On October in 2008, Android is sold for the first time. Android operation system is generally written in Java programming customization version. The development is very rapid. It is proven that in October 2012, there are 700,000 store applications that have been provided for Android. Besides, there are 25 millionsapplication that have been downloaded from Google Play. Survey also finds that Androind is the most popular platform for developers and utilized by 71% celullar application developers on April-May 2013.

Features found in Android are,

### 1. Handset layout

This platform can adapt highly, VGA, 2D library graphics, 3D graphic library based on OpenGL ES 2.0 specifications and traditional smartphone layout.

### 2. Storage

SQLite, light relational database used to save data.

### 3. Connectivity

Android support using connectivity technology including GSM/EDGE, IDEN, CDMA, EV-DO, UMTS, Bluetooth, Wi-Fi, LTE, and WiMAX NFC.

### 4. Messaging

SMS and MMS are available in form of message, including threaded text messaging and now Cloud Android to Deving Message (C2DM) is also a part of Android Support Messaging Device.

### 5. Some language Supports

Android can support some languages, thus it is more flexible.

### 6. Web browser

Web browser provided by Android based on open source WebKit layout machine and JavaScript Chrome V8 machine.

### 7. Java Support

Most of Android applications is written in Java. Platform which does not provide Java Virtual Machine, Java byte code cannot be executed. Java Class is compiled to executable Dalvic and run in Dalvic, a special virtual machine which is specially designed for Android and optimized for mobile set powerer battery using limited memory and CPU.

### 8. Media Support

Android support towards the following audio/video is still in media format :WebM, H.263, H.264 (in 3GP or MP4 container), MPEG-4 SP, AMR, AMR-WB (in 3GP container), AAC, HE-AAC (in MP4 or 3GP container), MP3, MIDI, OggVorbis, FLAC, WAV, JPEG, PNG, GIF, BMP.

### 9. Streaming media Support

Streaming media support is in form of RTP/RTSP streaping RTP / RTSP streaming (3GPP PSS, Isma), HTML download progresif (HTML5 <video> tag). Adobe Flash Streaming (RTMP) and Dynamic HTTP Streaming supported by Flash plugin. Apple HTTP Live Streaming supported by RealPlayer for Mobile, and by operation system in Android 3.0 (Honeycomb).

### 10. Hardware support addition

Android can use video/camera, touchscreen, GPS, accelerometer, gyroscopes, barometers, magnetometers, dedicated gaming controls, distance and pressure cencor, thermometer, accelerated 2D blits bit (hardware oriented, scaling, pixel format conversion) and accelerated 3D graphic.

### 11. Multi-touch

Android has original support for multi-touch which is in the beginning available in handsset such as HTC Hero. This feature is initially nonactivated on kernel level (it is possibly to avoid Apple patent violence on touchscreen technology at that time). Google has launched update for Nexus One and Droid Motorola which enable multi-touch native.

### 12. Bluetooth

Bluetooth in Android supports A2DP, AVRCP, send files (OPP), access phone book (PBAP), voice call and send contact between telephone. Keyboard, mouse and joystick (HID)

support are available in Android 3.1 +, and in previous version through producer customization and third party application.

### 13.Voice Call

Although Android cannot support original video call, however, some handsets have version adjusted from supported operation system, both through UMTS network (such as Samsung Glaxy S) or over IP. Video Call through Google Talk is available in Android 2.3.4 and Gingerbread Nexus S are enable to place Internet Call using SIP account. It increases VoOP call to another SIP account or even phone number. Skype 2.1 offers video calling in Android 2.3 which is included front camera support.

### 14.Multitasking

Android can perform some tasks or multitasking.

### 15.Voiced-based feature

Since the beginning, Android has provided Google search through voice, voice action to call, SMS, Navigation etc which are supported on Android 2.2. and furthermore.

### 16.Withdrawal

Android supports withdrawal which enable cellphone to be used as wireless/Wi-Fi hotspot cable. Before Android 2.2, it is supported by the third party application or producer customization.

### 17.Screen capture

Android has original support to catch screenshot, the ability to press power and volume button at the same time on Android ware. This original supports emerges after Android 4.0 is launched (Ice Cream Sandwhich) update which is firstly seen on Nexus Galaxy smartphone.

## 2.Android Application for Education

The following are some Android applications which can be used for education and beneficial for learners.

### a.Math Workout

Math Workout is a free application of Android to practice basic mathematic for learners, such as addition, subtraction, multiplication and division. There are six different activities. Each activity consist of its own serial with more difficult challenge. Valuation in this activity is based on correctness and speed. Tutor can see whether learners experience improvements from day to day or not. Since Math Workout can save learners' score, it enables evaluation.

### b.Words, Words, Words

Words, Words, Words is a free vocabulary application. It can be used as using flashcard to accustom tutors with words and quiz model.

### c.Edmodo Android app

This application can provide access to annual book, group, profile and library. Tutors can use this application to send messages to group, and learners can use Edmodo Android app to read messages from tutors.

### d.Grace

Grace is included in a new application which is launched on March in 2013 by Mobispectra Technologies. Tutor can manage all educational video into a place through Grace

application. The benefit of using this application is that tutors are able to open videos in the application quickly. Usually, they will be directed to external couple when they open YouTube video, while Grace does not. This application plays application through YouTube tutor, but it is embedded in Grace application. So, make sure that tutors have installed the application in their Android ware. It also enables them to open Wikipedia in application to find out relevant information quickly. Low part of video is a part to make note, and if tutor allow to access Google Drive account, he/she can save all their notes as record text in tutor's Drive. Tutor's note will be entitled as "Name of The Video Notes" in "grace-app" folder which make it easy to find. If he wants to make a note using this method, they may be interested in Kingsoft Office and Google Drive for Android application. Using both applications, it enables them to re-open his note and edit it. This application also has beautiful interface by using modern Android styling which is almost identical with YouTube application itself. As addition, tutors are able to add any contents they like. Thus they can follow all regular YouTube channels, and will not find ads within.

### e.Mobento

This Android applications enable tutors to download video in Android ware to watch it offline. Grace Application cannot perform this job. If Grace has the feature, tutors do not need Mobento. However, both applications deserve to be downloaded. They can download Mobento application in Google. Mobento works a little bit different from Grace. Tutor cannot add their own content here. Mobento contains of contents of Khan Academy, TED Talks, Yale and other sources. Tutors can give content as desired by them using unique searching feature from this application, which enables them to see how often a word is said. For example, a tutor finds the words "light and energy," red and blue bar will emerge beside the searching result. The bigger blue bar, the rarer "light" word is pronounced. If red bar is bigger, "energy" word is more often pronounced. It is an interesting way to find content desired by the tutor. Unfortunately, UB Mobento is worse than Grace. The basic color is brown and its styling will reminds him/her of Android 2.3 Gingerbread which performance is not really good. Fortunately, this application is free from ads. This is an interesting method to find tutor's desired content.

## 3.The Use of Android for Learning Media

Android supports learning using various features that have been provided. All available features are representative (can be repeated) whenever and wherever without tutor's explanation. In order to be maximum in using Android as learning media, tutor should previously know some things, which are:

**a.Which application that will be used:** Tutor should know which application that will be used, whether it is appropriate with material presented or not so that its use will be maximum.

**b.The use of utilized application:** It is clear that Tutor should know the use of application used by him/her so that he/she will be able to use as optimal and the learning objectives are achieved.

**c.Method of operating application that will be used:** The most important thing in using a media for tutors is to know how to operate the media that will be used so that it performs effectively and efficiently.

**d.Strengths and Weakness of application used:** The strength and weakness of application used is required to be known for

people who will use it for learning so that the learning becomes effective and can reduce negative impact caused by the application utilized.

**e. The easiness and uneasiness of application that will be utilized:** A good learning media is a media that will be easily operated so that tutors do not get confused and waste much time.

**f. Whether the application used is effective and efficient or not:** Teacher should be able to select which media that will make effective and efficient learning. If it is effective and efficient, the objective of learning will be reached easily and learners are able to quickly comprehend the material presented. A learning media must raise two effects, whether it is positive or negative. The positive one is that it helps teacher's learning in teaching because by using learning media, learners can easily understand the material presented. As a result, the teacher does not require to repeat it many times. One of negative effects is that teacher lacks of creativity because he/she has been provided with learning material that can help the learning process. The method to overcome the negative effect is that tutor or teacher can monitor children in using the application because they may open inappropriate applications that can distract the learning. Besides, he/she should keep combining the teaching method by not always using media or application so that they keep creative and learners do not depend on them.

### C. Learning Method and Media of Casing Board

Many factors hamper the development of KF learners' reading competence. Among them are less the learners' experience, low tutor's/source's quality in teaching, minimum learning activity, low learners' competence level, and ineffectiveness learning method which is utilized, especially when the reading methods less attract learners' interest. Here are reading methods utilized by tutor in KF learning:

- a. Syllable Method
  - b. Letter and Picture Method
  - c. SAS Method (syntetic analytic/ designing and elaborating structure)
  - d. Visual, Auditory, Kinesthetic, Tactile (VAKT) Method
- SAS Method (syntetic analytic/ designing and elaborating structure) can introduce syllable which consists of a group of letters assisted by picture which uses reading card to enable children in memorizing all syllables, then it is continued with Game learning which makes visual and auditory of learners to participate through guessing the words in assisting them to memorize sound and the shape of a syllable because this method develops visual, auditorial and kinesthetic aspects. SAS system reading method is a method which holds on "fun learning" principle. According to the author's experience as Funcional Literary tutor, learners prefer fun learning and involve them in direct practice so that the learning is not boring and does not make them sleepy.

### The effectiveness of using android media to eradicate illiteracy for street children

Effectiveness is said as an individual's success level in achieving his/her objective or target. Effective learning is a learning which enables learners to study easily and fun to reach their learning objectives as expected. The objectives of learning cover cognitive and affective objectives. The

cognitive objective is in form of learners' competence in mastering concept that can be seen from the test result score given, while the affective one is seen from their attitudes and activity during the learning. Effectiveness cannot only seen from productivity side, however an individual's perception. Also, in learning, effectivity is not merelly seen from the learners' success level in mastering concept presented by study result score but also the learners' response towards a learning followed.

Android Media is a learning media concept towards adult which orients on learners. As explained previously, Android media implementation on learners/learners in RW 03 SemanggiSubdistrict is based on the assumption that learners are adults who have other experiences and businesses and refer to some research which state that this learning is very good to implement on adults. This research is focussed on the learners' selves. The research samples are basic functional literacy learners who continue to intermediate functional literacy. Materials that will become the research object are *calistung* and basic rights on education, to get health service, have religion, and freedom of giving opinion. Based on the researchers' observation, these basic righ materials occur in most of the society and is difficult to understand by learners. The learning implementation which is executed in Semanggi before the learners continue intermediate functional literacy learning activity in RW 03 SemanggiSubdistrict cannot be separated from the use of learning media. Without media, the learning process becomes less optimal. The selected learning method is a media which is able to make the learning process more interactive, efficient, and interesting for the learners. The use of media with the characteristic will be able to optimize the learners' basic competence. The selection of Android media is based on the easiness of media use. Thus the material becomes a practical media and enables the learners to perform learning process in many places. The use of Android as learning media will make the learning process centers on learners, while tutors are only facilitators. The administrator of intermediate functional literacy study community in RW 03 Semanggi Sub district is expected to give new learning source alternative for learners concerning *calistung* material and basic rights through Android learning implementation. Learners will be able to perform learning process without dependency on tutors through this media implementation. Learners will also be more creative in determining when and what will be reached during the learning process. The objective of Android learning model implementation is to optimize prevailed competence standards, which are listening, speaking, reading, writing and calculating as the Basic Competence of Basic Literacy (SKPD)) using basic rights material. The indicators of the competence standard achieveness are that learners are able to read, listen, write, calculate and give opinion as the basic rights material that have been studied by learners.

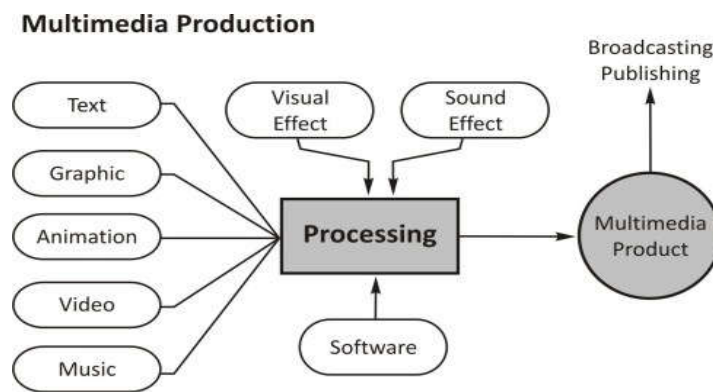
Here is the researcher's framework line in implementing Android learning model in learning community of intermediate functional literacy in RW 03 SemanggiSubdistrict.

### Factors which Cause the High Illiteracy on Street Children in SemanggiSubdistrict

Of the interview result and questionnaire distribution proposed to respondents, the factors which cause the high illiteracy on street children in Semanggisubdistrict are internal (personal), environmental and economic factors. Of the three factors,

personal factor is the highest. The factors are the less interest and motivation for studying so that they never learn to read totally

learning time on illiteracy eradication activity is only executed for 2 months. However, it is appropriate with the android media concept itself, that based on the experience, adult is able



Picture 2. Researcher’s thinking line

Table 1. Learning Community of Illiteracy Eradication

No.	Group	Place	Number of Learners	Number of Tutor	Info
1.	I	Lekdosari Market (Classroom 1)	5	2	
2.	II	Lekdosari Market (Classroom 2)	5	2	
3.	III	Lekdosari Market(Classroom2)	5	2	

Table 2. Schedule of Learnin Community of Android-based Illiteracy Eradication

No.	Group	Place	Day	Time	Tutor
1.	I	Lekdosari Market	Tuesday and Wednesday	04.00-05.30 PM	HasanahUmi
2.	II	Lekdosari Market	Monday and Friday	04.00-05.30 PM	RisaPutri
3.	III	Lekdosari Market	Thursday and Saturday	04.00-05.30 PM	UmiPutri

**The Implementation of Android Media in Gradual Functional Illiteracy Eradication**

After the target of illiteracy which is said by 15 street children is determined and the cause of high illiteracy level factor, the implementation of Android media is performed. The steps are:

- a. Preparing curriculum and modules that will be used. In this case using existing curriculum and module which are materials in Android application. Each learners get one Android smartphone.
- b. Deciding a place to study. In this case, the place to study is in Lekdosari Market.
- c. Preparing supporting learning media, which is an equipment that can be used to smooth the objective of learning such as media utilized in the learning environment as whiteboard.
- d. Determining a learning community. The 15 street children are grouped into 3 groups. So, each group consists of 5 learners who are placed in each a place to study that has been determined and guided by 2 tutors. The table below will explain more details:
- e. Furthermore is to make a schedule and contract of learning through agreement between tutor and learners. It is agreed that the learning is performed twice a week for 3 months. Each meeting is executed more or less 90 minutes or one hour and a half with the following details: 1 first hour is used to read and the rest, 30 minutes, to learn writing. This activity is started from August to November 2016.

With various obstacles occur in te field, the attendance number of each learner is 12 meetings. Therefore, the effective

to read a story book in 10-15 meetings. The result obtained from this research is that all learners experience extraordinary reading and writing skill improvement. It proves android media effectiveness is utilized in illiteracy eradication. Since the learning activity is performed for 3 months with 12 effective meetings, almost 100%, which is 97% of them are fluent in reading. Only 3% or 1 person who has not able to read. Therefore, the illiteracy eradication program should be performed by the government and the society so that the numbers of illiteracy is decreased as expected by the tutor.

**Conclusion**

Based on the backround and discussion result that have been provided on the explanation above, it can be drawn a conclusion as follow:

- 1. Android-based Gradual Functional Literacy Learning Media can give effective learning activity to improve learners’ understanding in Functional Literacy learning activity.
- 2. Android-based Gradual Functional Literacy Learning Media can enable tutors in providing and bringing learning media to Functional Literacy learners’ place of study.
- 3. Android-based Gradual Functional Literacy Learning Media is proven as effective in increasing learners’ intererst and attractiveness towards the learning media which is utilized in Functional Literacy Learning.

**REFERENCES**

“Functionary Illiteracy.” [http://id.wikipedia.org/wiki/Buta\\_aksara\\_fungsional](http://id.wikipedia.org/wiki/Buta_aksara_fungsional) (8thMarch 2012)

- Ahmad, NazaliShaleh. *Al TarbiyyahwaMujtama'*, ter. SyamsuddinAnsyrofi, Education and Society. Yogyakarta: Sabda Media, 2011.
- Arikunto, Suharsini. *Research Procedure of A Practical Research*. Jakarta: RinekaCipta, 1996.
- Aryad, Azhar. *Learning Media*. Jakarta: RajaGrafindoPersada, 2006.
- Basleman, AnisahdanSyamsuMappa. *Theory of Adult's Learning*. Bandung: RemajaRosdakarya, 2011.
- Education Office of South Sulawesi Province, data in 2010.
- Educational and Cultural Department, Indonesia Dictionary. Second Edition, , Jakarta: Balai Pustaka,1991.
- Hamalik, Oemar. *Education MEdia*. Issue. VI; Bandung: Citra AdityaBakti, 1989.
- Indonesia National Encyclopedia.Aksara.Volume 1 Issue. IV; Bekasi: Delta Pamungkas, 2004.
- Kamil, Mustofa. *Andragogy*, (t.t, t.p, t.th), (17<sup>th</sup> March 2012).
- Kamil, Mustofa. *Education and Training Model (Concept and Application)*. Bandung: Alfabeta, 2010.
- Marzuki , M. Saleh. *Informal Education*. Surabaya: RemajaRosdakarya, 2010.
- Musfiqon, Media and Source Development. Jakarta: PrestasiPustakarya, 2012.
- PP 2010 Association on Management of Education Provision. Yogyakarta: PustakaYustisia, 2011.
- Republic of Indonesia. "RI Act Number 20 Year 2003 on National Education System", chapter IV, Article Five Paragraph 1.
- Riduwan. *Easy Study of Research: for Teachers, Employees and Beginner Researcher*. Bandung: Alfabeta, 2011.
- Rohani, Ahmad. *Educative Instructional Media*. Jakarta: RinekaCipta, 1997.
- Sahabuddin. *Informal Education: An Introduction in Development Concept and Principles Understanding*. Ujung Pandang: IKIP Ujung Pandang, 1985.
- Saliman and Sudarsono. *Teaching and General Education Dictionary*. Jakarta: RinekaCipta, 1994.
- Sarwono, Jonathan.*Quantitative and Qualitative Research Method*. Yogyakarta: Grahallmu, 2006.
- Sudjana, Nana. *Teaching Learning Process Bases*. Issue.. IV; Bandung: SinarBaruAlgesindo, 2004.
- Sugiyono.*Statistics for Research*.Issue. IX; Bandung: Alfabeta, 2002.
- Sujarwo. *Basic Concept of Functional Literacy: Bachelor Thesis*. Education Faculty of State University, Yogyakarta, 2008.
- Sulton, Latifah. *Functional Literacy Program Success*. Bachelor Thesis, Agricultural Faculty of Bogor Agricultural Institue, Bogor: 2008.
- Suprijanto.*Adult Education from Theory to Application*.Issue. III; Jakarta:BumiAksara, 2009.
- Syah, Muhibbin. *Psychology of Learning*.Issue. XI; Jakarta: RajawaliPers, 2011.
- Tim Prima Pena. *Popular Terms Dictionary: Scientific Refference "Ideology, Politic, Law, Economic, Social, Culture and Science*. Complete Edition. Issue I. Surabaya: Gitamedia Press, 2006.
- UNESCO. *The Plurality of Literacy and its implications for Policies and Programmes* (France: the United Nations Educational, Scientific and Cultural Organization, 2004.
- Uno, Hamzah B. *Learning Model: Creating Creative and Effective Learning Process*. Issue. 1. VII; Jakarta: BumiAksara, 2011.

\*\*\*\*\*