# Social Return On Investment (SROI) for Learning Includes Project 2018

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# **Executive Summary**

With the existing assistive technology and the power of Internet, Learning Includes, an accessible virtual / mobile tuition platform for the visually impaired (VI) / blind and other disabled students was launched in 2017 by us, DID MY Innovations and SOS Missions, in collaboration with Sasbadi Online and MindTech Education, a wholly-owned subsidiary of Malaysian leading public listed education publisher, Sasbadi Holdings Bhd. With the support from Yayasan Inovasi Malaysia (YIM), the project has expanded to aid 153 special education students ranging from visually impaired/blind, hearing impairment, Dyslexia students age between 10 to 18, aiding 12 special education teachers through virtual tuition teaching tools and 3 VI/blind graduates to be learning coaches on the second year in operation.

Unequal access to education is a prevailing problem faced by the visually impaired / blind students globally, including our students in Malaysia. These students are often left behind in their studies, hindering them to progress in education that plays a significant role in securing better job opportunity. This is mainly due to the limitation of braille books, (i.e. not updated timely, low portability, expensive to produce) that is used as the primary education resource in the current education landscape (*Zheng 2014*). The VI / Blind students were also less motivated to perform better in their study, besides receiving less interaction, encouragement and involvement from the parents as more than half of them are staying in the school hostel.

On the other hand, the often neglected VI / blind and other disabled graduates in Malaysia are facing challenges to secure dignified jobs even with suitable qualifications (*Sinar Harian Online 2017, Astro Awani 2018*). Marginalised by discrimination and misunderstanding in the society, majority of them are left with no choice but to work as masseuses, telemarketers and other jobs despite having the ability and potential to perform in other works. Not to mention that the charity paradigm and mindset that is custom to the south-east Asian community, which include Malaysia, further widen the gab of disabled community from the others, as they are given opportunities on the basis of sympathy and not based on their potential (*World Economic Forum 2017*). As a result, this community is trapped in a cycle of poverty.

Coming to the second year of the project, we have expended to 153 VI / blind and other disabled students in the Peninsular Malaysia region and bringing them one step closer towards equal education by providing them with the most accessible and blind-friendly virtual tuition platform in the market to date. This platform offers the students educational resources i.e. notes, trilingual dictionaries, practices, video lessons and sample exam paper that is hard; if not totally unavailable to them prior to this project's intervention. It has assisted the teacher from the special / mixed school in lesson planning thus helps in reducing their workload.

The project has also provided meaningful and dignified job opportunities to 3 VI / blind graduates as virtual tuition coach that were previously deprived off them. The VI / blind graduates were trained, empowered and equipped with computer skills, coaching skills, soft skills e.g. communication skills, as well as obtaining screen reader software expert certification while serving as role models to inspire and motivate VI / blind students to never give up and also aiding them to improve in their studies.

Through our finding, the Social Return on Investment ratio for the current project is 4:1 (rounded off from 4.04:1) which indicates that there is RM 4 worth social value received by our beneficiaries (the 153 VI / blind students, 3 VI / blind coaches and 12 special education teachers) for every RM 1 invested. Some remarkable achievement includes 3 year 6 VI/blind students onboard in the project scored between 2 to 3 As in the UPSR General Exam; 2 students Scoring 5 to 8 As in PT3 and 3 students scoring 5 to 7 As in SPM 2018. Through this project, we aim to meet three of the United Nation Sustainable Development Goals which are (1) Quality Education, (2) Decent Work and Economic Growth, and (3) Reducing Inequalities.

# Introduction

Current report shares the finding on values received by primary stakeholders of the project which are 153 VI/blind and other disabled students aged between 10 to 18 studying in special education / integrated schools in Peninsular Malaysia, 3 VI / blind graduates as virtual tuition coaches, 12 teachers from Special and mixed schools sponsored with virtual and accessible teaching tools and materials and other stakeholders on board in Learning Includes. And current report will demonstrate the impact value of our project from the perspective of our primary stakeholders with a quantifiable Metrix; and calculate the Social Return on Investment ratio for the current project.

# **Project Background**

## **Unequal Education**

The fourth Sustainable Development Goal of the United Nation has clearly defined that equal access to quality education is a fundamental right of everyone, which include the VI/blind. However, these students in every single part of the world, including Malaysia, are not enjoying equal education thus hindering them from pursuing higher education. The implication is significant for the student's future as education plays a crucial role in ensuring a better quality of living beside earning respect and dignity for themselves in the society as discussed in a 2017 article entitled *"To enhance economic growth, help people with disabilities get back to work"* in the World Economic Forum. One of the key factors of unequal access to education is the use of braille books as the primary educational resource in the current education landscape in Malaysia, with 3 major disadvantages namely:

- Not timely Students receive the complete braille book with the latest syllabus one year after the publication of the printed book (according to SMK Pendidikan Khas Setapak, A blind/VI special school in Kuala Lumpur)
- b. Low portability a regular printed book would have at least 4 braille books that is 2 to 3 times thicker and much larger size with heavier weight.
- c. Expensive Braille book printing cost the Ministry of Education RM 500,000 per contract as detailed by former Deputy Minister of Education Malaysia, Datuk Chong Sin Woon in the Upper House of Parliament, in September 2017

The limitation of Braille book was also extensively studied and confirmed by various researchers compiled by Zheng in her research entitled *A Study on Blind Students' Experience of Provision and Support* in 2014, especially on its pricing and affordability.

From our observation, about 60% of the parents were less involved in the students' studies in the school as they were busy with jobs. The interaction between students and parents were also minimum as more than half of the students were staying in a hostel.

## **Inequality and Job Discrimination**

The eighth and the tenth United Nation Sustainable Development Goal (Decent Work and Economy Growth, and Reduce Inequality) also emphasized the importance of fair employment and promoting equality regardless of race, religion and disabilities. However, the visually impaired/blind and other disabled graduates in Malaysia is unable to secure dignified jobs or treated with fare employment. As reported by former welfare minister, Datuk Seri Rohani Abdul Karim in a news report on Berita Harian Online in 2017, the civil servant who are disabled were only 0.24% out of 1.6 million, and the disabled workforce in private sectors was expected to have an even lower percentage. This problem is further elaborated by Firdaus Hassan, an officer in the Counselling unit in the University of Malaya, whom himself is a disabled person. In a news report in Astro Awani in 2018, he stated that finding a job for a disabled graduate is difficult as there are discriminations and doubts about their ability. Tiun has also confirmed the issue as discussed in his research entitled *Challenges Faced by Malaysians* 

*with Disabilities in the World in 2013.* An article on the World Economic Forum further justified that many of the religions in the region promote the value of charity and kindness, which results in sympathy towards the less fortunate. This societal environment raises the disabled to be dependent on the family; and leaves both the society and the disabled feeling like they do not have the skills and capabilities to thrive.

By taking these challenges as the point of departure, we DID MY Innovations and SOS Missions, together with Sasbadi Online and MindTech Education, a wholly-owned subsidiary of leading public listed education publisher, Sasbadi Holdings Bhd, have collaborated to create a virtual / mobile tuition project by bringing existing assistive technology and the power of internet together to tackle the above problems. We strongly believe that technology should leave no one behind. This is agreed by Zheng in her research entitled *A Study on Blind Students' Experience of Provision and Support* in 2014, which found that softcopy or virtual resources are one of the most helpful resources for the VI/Blind students in their studies. Through the financial support from Yayasan Inovasi Malaysia (YIM), the virtual / Mobile tuition platform, which is currently the most blind-friendly platform (80% compatible with screen reader software, an assistive technology for the blind to access computers and smartphones), enables:

- a. VI/blind and other disabled students to access to the latest notes and practices according to the syllabus by the Ministry of Education Malaysia and access to educational resources that are previously not available to them such as Trilingual dictionaries, sample exam papers, video lessons and revision practices.
- b. The VI/blind and other graduates with dignified and meaningful jobs as virtual tuition coaches through the use of accessible teaching tool to help and motivate the future generation.
- c. Providing assistance to special/mixed school teachers with additional resources to plan lessons for their students.

With Learning Includes, we aim to meet three of the United Nation Sustainable Development Goals which are (1) quality education, (2) Decent Work and Economic Growth, and (3) Reducing Inequalities.

# Methodology

# a. Establishing Scope and Stake Holders

The principle beneficiary of Learning Includes is 153 VI / blind and other disabled student (age between 10 to 18) studying in special education and mixed school in peninsular Malaysia, 3 VI/blind graduates as virtual tuition coach, and 12 teachers from special/mixed school. The following table summarised the different stake holders with a brief description of them. (refer to Appendix 3 for the Stakeholder contact)

Stakeholder	Description		
153 VI/Blind Students	Principle beneficiary in Learning Includes		
	Project, Sponsored fully to study using Virtual		
	tuition platform		
12 Special Education / mixed school Teachers	Principle beneficiaries, sponsored with virtual		
	tuition teaching account to aid special		
	education students in their studies.		
3 VI/Blind Coaches	Principle beneficiaries, being trained and		
	engaged to help VI/blind students as		
	Virtual/mobile tuition Coach		

Table 1: Stakeholder descriptions

Yayasan Inovasi Malaysia	Funding RM 120,000 to the whole operation	
	of the project which includes sponsoring VI /	
	blind and other disabled student with virtual	
	tuition platform account.	
Sasbadi Online and Mindtech Education (a	provides product training and technical	
wholly owned subsidiary of Sasbadi Holding	support to VI/blind coaches, special/mixed	
Bhd), leading public listed education publisher	school teachers and VI/blind and other	
	disabled students	
Bahagian Pendidikan Khas and Bahagian	Evaluation and Approval of Learning Includes	
Teknologi Pendidikan, Ministry of Education	to be implemented in special and mixed	
Malaysia	schools.	
Parents	Parents of the sponsored VI/Blind students	

# **b.** Evidence The Outcomes and Values of Beneficiaries

The following will discuss the social values experienced by the project beneficiaries (153 VI/blind and other PWD student (age between 10 to 18), 12 special/mixed school teachers and 3 VI/Blind Graduate/coaches) onboard in this project in 2018. Short interviews were conducted from 1 January 2019 to 15 April 2019 involving 28 students as the sample, which 15 are recorded audio interview, 5 video interviews (which 3 videos featuring 2 students), 5 telephone interviews and one written testimony from the students. The sample consist of VI/ blind students from SMK PK Setapak, SKPK Jalan Batu, SMK Kajang Utama, SMK Jelapang Jaya and SMK Padang Temu. Each interviews were transcribe accordingly and keywords were taken from the transcript to systematically classified and quantified in order to understand the student's perceived social value they have experienced from our project. As for the teachers and visually impaired coaches, we conduct informal conversation and also written testimony to identify the perceived benefits and values in current project.

Table 2 below shows the breakdown of the interviewees

School	Blind Student	VI Student	Male	Female	Hostel	Daily
SMK PK Setapak	11	12	16	7	22	1
SKPK Jalan Batu	1	2	2	1		3
SMK Jelapang Jaya	1		1			1
SMK Kajang Utama		1		1		1
Total	12	15	19	9		

Table 2: Interviewee's breakdown

## I. VI / Blind Students

The social value experienced and mentioned by the student upon taking part from this project is summarised into 5 points as followed:

- Providing comprehensive yet easy-to-understand notes.
  - ➤ 32.1% of respondent mentioned that Learning Includes has provided them with comprehensive notes to study and understand a certain topic. One of the 2018 SPM best student, Syafiq Daniel supported that the notes is a good representation of what is

taught in the textbook syllabus as the other materials available online is either too short or not comprehensive.

- Practices helps to familiarise with real Examination questions
  - 25% of respondent mentioned that they are able to understand the exam questions and the format better through repeated practice in the learning platform.
  - They also agreed that the platform makes them more experience with exercise, and found out some of the exam questions resembling the exercises they did before in the learning platform.
- Additional materials and references to complement their study
  - ➢ 39.3% of respondent shared that the project has provided them with additional materials to study as the existing materials are very limited.
  - ➤ 50% of the students shared that they were relying fully on braille/printed text book as their only learning resource while 35% of them using notes produced by teachers prior to the project's intervention.
  - Two of the respondents, Suren and Hanafi said that doing a revision is difficult as they need to produce their own notes as well as by relying on teachers or other friend's help prior to the intervention of the project.
- Enable independent learning
  - 10.4% respondent stated that they are able to study independently using the platform without depending on others.
  - Interestingly, about 17.8% of respondent previously relying on helps from friends to access to notes and practices, and they did not highlight independent study as the benefits they received.
- Easy access to learning material
  - > This is the most frequently mentioned benefits among the respondents.
  - $\blacktriangleright$  42.9% of respondent agreed that the project has helped them to study more easily.
  - Some of the convenience include easy to search for facts in a subject, portable and can be access anywhere, including exercises and notes in a single platform; and the contents are well organised, making revision more easily.
  - Vickness and Naquiidin shared that the braille textbook is located in the class, and rarely they bring back to home or hostel. Thanks to the portability of the platform, Kar Chean shared that his school beg no longer heavy.
  - Arash and Haris pointed out that not all blind student will have a complete set of notes as there is always a tendency for the notes to go missing, thus making the process of study more difficult. With the help of the platform, all materials are organised in a single platform and student will not need to worry about their notes disappearing.

(Please refer to Appendix 1 for the full transcript and analysis of responses of the students)

- From the above-mentioned value, Learning Includes social value is estimated based on the cost of alternatives the student will be using in the absence of the project. The following presents the alternatives together with the costs in a year.
  - Braille Craft Paper for personal notes and exercises
    - The student is using the standard Braille Craft Paper at school and in average, student are using at least about 7300 sheets to draft down exercises, making notes and doing practices in a year (Average 20 sheets per day)
    - According to Malaysian association for the blind, the Craft Paper cost RM 30 for a pack (with 500 sheets), and current report is taking 15 pack of Craft Paper per individual per year to measure the worth of our project.
  - ▶ 8.5x11" Plain Cut Sheet paper for braille notes printing by teachers
    - In average, a student requires at least 3650 sheets of Cut Sheet Braille printing papers for all subject combine annually. This include practices, lesson handout, notes and sample exam paper printed by the teacher

- According to American Thermoform, the leading braille paper supplier, the cost of a pack with 1000 sheets of these braille printing paper cost RM 152.88 (USD 36.99), and current report is rounding of annual student's usage at 4 packs of Cut Sheet Papers (4000 sheets annually)
- > Tuition classes
  - The students are required to join tuition classes as they don't have enough reference book to study.
  - We estimated the rate of a standard tuition fees at RM 320 according to the rate provided by Malaysian Tuition Consultancy

## II. Virtual Tuition Coaches

The following are the highlights of benefits enjoyed by our Virtual Tuition Coach:

- Stable Monthly Income
  - > Both coaches shared that they have stable income and able to self-sustain
- Equipped with crucial and practical skills
  - > They receive training in the area of communication, computer and coaching skills

We concluded that the virtual tuition coach position is worth RM 71,171.76 per VI / blind graduates in a year, by comparing the benefits received with the current market rate of practical skill training by other training provider i.e. Computer training courses by Malaysian Association for the Blind, and Screen reader software (NVDA) training by Genashtim Innovation, and NVDA Expert certification charges by Non-Visual Desktop Access. Not to mention that the position of the virtual tuition coaches itself is worth RM 16,800 annually.

## III. Teacher from Mixed and Special Schools

The following is some benefits highlighted by the teachers who were provided with teacher account.

## • Less Preparation Time for a Lesson

- As the notes are available in the virtual learning platform, Cikgu Suhaila said that it is easy for her to guide the students in her Math subject. Cikgu Jais said he read the notes in iLEARN ACE out loud to his students to guide them in studies
- Cikgu Muspirah said she has no need to prepare for her lesson plan as she can use iLEARN ACE in class.
- > With that, the teacher has more time to invest in other activities or rest.

## • Interaction with Students

- Cikgu Yap from SMK (P) St. George has also agreed that the materials in the learning platform helped the teachers and students to have more interaction.
- With a lesser workload, we anticipate that the teachers may save some cost for counselling services as there is a lower tendency to experience moderate or severe stress. Current report is putting the estimate at RM 80 per year, assuming that the teacher can save RM 80 from joining a counselling session in a year. According to Counsellor Fees Regulations 2017 by Attorney General's Chamber of Malaysia, the rate of counselling charges is fixed at the range of RM 80 to RM 150 for a 45 minutes session depending on the experience and qualification of the psychologist.

Below is a summary of the estimated total value worth by this project to our principle beneficiaries.

Table 3: Total Value Worth

Beneficiaries	Description	Source of Rate/charges	Value worth (RM)/year x number of Students	Total Financial Proxies Value (RM)
Student	Tuition classes	Malaysian Tuition Consultancy	3,840.00 x 153	532,440.00
	Braille Craft Paper for notes and exercise	Malaysian Association for the Blind	450 x 153	68,850.00
	CutSheetPapersforBraillePrintingand handouts	American Thermoform	611.52 x 153	93,562.56
Total				694,852.56
Coaches	Screen Reader NVDA courses	Genashtim innovation	1,223.25x3	3,669.75
	Computer Courses	Malaysian Association for the Blind	3,600.00x3	10,800.00
	Call Centre Courses	Malaysian Association for the Blind	1,800.00x3	5,400.00
	Screen reader software (NVDA) Expert certification	NVDA Australia	300.67x3	902.01
	Annual income	Based on Rate of Virtual Learning Coach in current Project	16,800.00x3	50,400.00
Total				71,171.76
Teacher	Counselling or Mental Health Check	Counsellors Fees Regulations 2017	80.00 x 12	960.00
Total				960.00

*Note: the rate and charges tabulated above are based on the current market rate of the respective training providers, organisations and institutions.* 

From the results, the values and theory of change experienced by the principal beneficiaries will help us to determine the financial proxies, an estimate of monetary value on the social value gained by the beneficiaries.

#### a. Establishing Impact

To avoid over-claiming the impact experienced by the beneficiaries, discounting factors is considered in the SROI calculations in order to reduce or constrain the values of individual social returns. These discounting factors include

# I. Deadweight: What probably would have happened anyway, if the project did not take place:

- We have identified 3 deadweights for students, 1 deadweight for VI/Blind coaches and 1 deadweight for teachers; which will be discussed below. Please take note that the deadweight was only concerned with the perceived effectiveness through our research and observation and feedback from the beneficiaries.

#### **Deadweight for Student**

- All schools will diploid VLE Frog, a virtual learning platform for public schools in Malaysia that is made compulsory to be used by the students. However it failed to assist the VI/blind students as the learning platform was not accessible with even the use of assistive technology i.e. screen reader. Thus we position the deadweight of the VLE Frog as 0%
- There are tuition classes conducted for year 6 students and form 5 students in SKPK Jalan Batu and SMK PK Setapak. The tuition was joined by 28 form 5 students and 4 year 6 students from SKPK Jalan Batu starting from the month of May and March respectively. The following provide an estimation of the deadweight by calculating the percentage of beneficiaries that is using the tuition services.

Percentage of Deadweight of tuition program in SMK PK Setapak and SKPK Jalan Batu =  $(28+4)/153 \times 100$ = 20.9%

- We have also found out that SMK PK Setapak school counselling unit will conduct motivational programme annually by inviting former students to return and shared their success with the fellow junior. However the perceived effectiveness of the program is estimated to be at 10% as only 10% of the students were actively participating as observed by our virtual coach who is also present as a guest speaker.

#### **Deadweight for Learning Includes Coach**

- The coaches will join other paid practical courses offered by another training provider i.e. basic computer courses for the blind and call centre agent courses in Malaysia Association for the Blind, and Non Visual Desktop Access (NVDA) screen reader software training course by Genashtim, with the hope that they will secure a job based on the learned practical skills. However, the results of the training did not guarantee employment opportunity thus it is perceived as not very effective by the VI/blind coach.
- Thus we estimate the deadweight at 5% for the alternative courses they will join in the absent of current intervention.

#### **Deadweight for Teachers in Special/Mixed Schools**

- The deadweight experienced by the teachers is 50% as the teacher is provided with the printed or online resources by the school. Teacher is required to manually translating the printed material to braille and the process is often time consuming.

- The school (SMK PK Setapak) has also subscribed with Bank Soalan by Sasbadi, a data base of questions with sample answer access through online portal, and it is the teachers primary tools to prepare exercises for students

The table below summarises the deadweight percentage estimated for the principle beneficiaries measuring the effectiveness of alternative programme they will participate in the absence of the current project.

Beneficiaries	Description	Estimated Deadweight (effectiveness of alternatives)
Students	VLE Frog learning platform	0%
	Tuition classes (form 5 and UPSR students from SMK PK Setapak and SKPK Jalan Batu only	20.9%
	Motivational Programme	10%
Average Deadweight		10.3%
Coaches	Practical courses (include computer, NVDA screen reader training) and call centre courses)	5%
Teacher in Special and Mixed School	Bank Soalan Sasbadi Online and other printed materials and exercises for students	50%

Table 4: Deadweight Percentage Estimated for the Principle Beneficiaries

## II. Attribution: Who else was responsible for the changes taking place

- Based on responses from the VI/Blind students, the overall attribution rate is 30.35% for the following justification:

a. 25% of the students are using this platform to combine with some other online material such as YouTube Channel of teachers to assist in their study.

b. 35.7% of students are still using teacher's notes even with the present of current platform.

c. Thus the Attribution is taken based on the average contributing factors that the beneficiaries has credited to assist them in their study; and the attribution rate is 30.35%

- On the other hand, the attribution rate for the teachers is 33% as the teachers were not very active using the platform but instead using some other alternatives or producing their own material for teaching.

# **III.** Drop-off: What is the future annual risk of participants abandoning the practices or losing their benefits?

a. The current project is a one-year project whereby the social values were currently measured within 2018. Thus the drop-off rate is not measured in the current report.

#### IV. Duration: How long are the outcomes likely to last?

- The duration outcome experienced by the 3 principle beneficiaries are different. The discussion is as follows.
- a. The outcome duration estimated for students is one year as they will only experience the values within the year the project is executed.
- b. The conservative estimate duration of outcome for the coach is minimum 5 years as the skills and experience will still be relevant for them to run their own tuition centre in this duration.
- c. The outcome experienced by Special and mixed school teachers onboard to this project is a year, as the virtual / mobile learning platform provided is an annual license. Upon expiring, the teacher are unable to access to the materials in the virtual learning platform.

## Discount rate: Discounting the value of future returns.

Discount rate recognises that people generally prefer to receive or use their money today rather than tomorrow because there is a risk or opportunity cost associated with a better returns. The current report is using 0.035 as the discounted rate for social values in accordance to the value set by HM Treasury's Green Book 2013.

# **Calculating the SROI**

Current section will explain the calculation of Social Return on Investment in detail by summing up the present value experienced by the 3 different primary beneficiaries to be divided by the total invested amount. Please note that the present value is calculated separately as each beneficiaries has its own impact values and its own discounting factors.

Total Sponsored amount by Yayasan Inovasi Malaysia = RM 120,000 Total Impact Value (students = Financial Proxies – Deadweight – Attribution - Drop off

= RM 694,852.56 - 10.3% - 30.35% - 0% = RM 434,116.43

Present Value (Student) = Impact Value / Discounted Rate

= RM 434,116.43/(1 + 0.035) = RM 419,436.17

Total Impact Value (Coaches) = Financial Proxies – Deadweight – Attribution

= RM 71,171.76 - 5% - 0% = RM 67,613.17

Present Value (coaches) = Impact Value / Discounted Rate

= RM 67,613.17 / (1 + 0.035) = RM 65,326.74

Total Impact Value (Special / Mixed School Teachers) = Financial Proxies – Deadweight – Attribution

= RM 960 - 50% - 33.33% = RM 320.02 Present Value (special/mixed school teacher) = Impact Value / Discounted Rate

= RM 320.02/ [(1 + 0.035) ] = **RM 309.19** 

#### SROI Ratio = Total Present Value / Total Investment

= (RM 419,436.17 + RM 65,326.74 + RM 309.19) / 120,000 = RM 485,072.1/120,000 = **4.04** (Round off to **ratio 4:1**)

Current report concluded that there is a return ratio of RM 4 for each 1 ringgit invested in the project to benefit the VI/Blind students with learning resources and also a step closer to equal education, besides opening door of opportunities to the VI/blind graduates as virtual tuition coaches to be able to enjoy self-sufficiency with a dignified job. Lastly, the investment helps the teachers in special and mixed school to have a better teaching experience by providing additional resources that will help reduce lesson planning time, and lifting up the burden at school.

For further information, please reach out to us at the following:

Contact Person:

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Learning Includes Project: www.learningincludes.com

DID MY Innovations website: www.didmy.org

#### Reference

American Thermoform 2019, BRAILLE PAPER 8.5×11" – PLAIN CUT SHEET, http://www.americanthermoform.com/product/braille-paper-8-5-x-11-single-sheets/?attribute\_pa\_sheet-count=1000-sheets&attribute\_pa\_shipping=free-matter-shipping

Astro Awani Online 2018, Realiti Graduan OKU di alam pekerjaan http://www.astroawani.com/berita-malaysia/realiti-graduan-oku-di-alam-pekerjaan-166204

Berita Harian Online 2017, Jumlah OKU di sektor awam bawah sasaran https://www.bharian.com.my/node/277607

Government of United Kingdom 2013, Green Book supplementary guidance: discounting, https://www.gov.uk/government/publications/green-book-supplementary-guidance-discounting

Gurney Training Center, Malaysian Association for the Blind 2018, Call Centre agent Training Application Form, Terms and Condition. https://www.mab.org.my/maborg/Forms/new/GTC% 20Application% 20Form.pdf

Malaysian Association for the Blind 2013, MAB Sales Catalog: Paper, http://mabsales.blogspot.com/2013/01/papers.html

Malaysian Tuition Consultancy 2018, Tuition fee guideline, http://malaysiatutors.com/malaysiatuition-fee-guidelines/

Mohd Zuri, Aznan Che Ahmad and Suzana Ibrahim 2014, Stress among Special Education Teachers in Malaysia, Article in Procedia - Social and Behavioral Sciences, No, 114, :pp. 4-13

Sinari Harian Online 2017, Buku teks braille tidak dibuat secara tender http://www.sinarharian.com.my/nasional/buku-teks-braille-tidak-dibuat-secara-tender-1.772229

The Star Online 2018, Teachers: Teaching no longer a passion but a burden today, <u>https://www.thestar.com.my/news/nation/2018/10/12/teachers-teaching-no-longer-a-passion-but-a-burden-today/</u>

Tiun LT 2013, Challenges Faced by Malaysians with Disabilities in the World, https://www.researchgate.net/publication/271123597\_Challenges\_Faced\_by\_Malaysians\_with\_Disabi lities\_in\_the\_World\_of\_Employment

World Economic Forum 2017, To enhance economic growth, help people with disabilities get back to work, <u>https://www.weforum.org/agenda/2017/05/to-enhance-economic-growth-help-people-withdisabilities-get-back-to-work/</u>

Zheng XF 2014, 'A Study on Blind Students' Experience of Provision and Support in Schools' submitted in part fulfilment of the joint degree of MA/Mgr. Special and Inclusive Education – Erasmus Mundus University of Roehampton, University of Oslo and Charles University

#### List of Appendix

#### **Appendix 1: Research Data and Findings**

Student Interview Transcript: https://drive.google.com/open?id=1hdEK325B7K\_FZ63LAHdPztR1vRg6jRy4

Testimony Letter by Teacher https://drive.google.com/open?id=1hq2tHPj1vm4Z-ulfhRsSpLfuJzojZoIn

Testimony Audio and Video Interview by Students https://drive.google.com/open?id=1n053IOL2RzVmt5Q3wWtuFSr\_y5Dy-mHv

Student Interview Data Analysis

#### Appendix 2: List of Stakeholder's profile

#### 1. Funder

a. Yayasan Inovasi Malaysia Person In Charge: En. Azmeer Email: azmeer@yim.my Webpage: www.yim.my

#### 2. Content provider and technical support

 a. Sasbadi Online Person In Charge 1: Mr. Anthony Gan, Product Development Director Email: anthony@sasbadionline.com Tel No: 0123058962

Person in Charge 2: Mr. Lee Saik Hoong, Technical Chief Email: <u>saikhoong@sasbadionline.com</u> Tel No. 0172231148 Website: http://www.sasbadionline.com/

# 3. Ministry of Education Bahagian

#### Pendidikan Khas

Person In charge: Dr. Hjh Noraini bt. Hj Zainal Abidin Designation: Ketua Unit Pusat Perkhidmatan Pendidikan Khas Email: noraini.zainalabidin@moe.gov.my Tel No: 0175441633

#### Bahagian Teknologi Pendidikan

Person In charge: En. Hj Zaidi bin Yazid Designation: Pengarah Email: zaidi.yazid@moe.gov.my Tel No: 0320818118

#### 4. SMK Pendidikan Khas Setapak

Teacher in charge: Pn. Muspirah Ahmad Salim Email: <u>muspirah.ahmadsalim@gmail.com</u> / <u>wea0211@moe.edu.my</u>

#### Tel: 0135135112 / 0341493701

#### 5. SKPK Jalan Batu

Teacher in Charge: Cikgu Azmi (Penolong Kanan) Email: azmi7176@gmail.com Tel: 0137702258

Teacher In charge 2: Cikgu Amir Ikwanuddin Email: muchelia@yahoo.com Tel: 0129471323

#### 6. SKPK Princess Elizabeth

Teacher in Charge: Cikgu Azmi (Penolong Kanan Tadbir) Email: azmi7176@gmail.com Tel: 60136559049

Teacher in Charge 2: Cikgu Ilham (Guru ICT dan Guru Data) Email: mohd95858@yes.my Tel: 60136559049

#### 7. SKPK Alma

Teacher in Charge: Cikgu Sharidan (Penolong Kanan Tadbir) Email: <u>shahridan80@gmail.com</u> Tel: 0194108840

Teacher in Charge 2: Cikgu Thiayagu (Guru ICT dan Data) Email: Not provided Tel: 0165438371

#### 8. SKPK Kuala Terengganu

Teacher in Charge: Puan Sa'yah (Penolong Kanan tadbir) Email: tba3087@moe.edu.my Tel: 609616322

#### 9. SK Sungai Kantan

Teacher in Charge: Cikgu Hana (Resource Teacher) Email: merahserindik@yahoo.com Tel: 0192212787

#### 10. SMK Kajang Utama

Teacher in Charge: Cik Nur Hanita (Pembantu Pengurusan Murid) Email: Not provided Tel: 0172645646

#### 11. SMK (P) St. George

Teacher in Charge: Ms Yap (Resource Teacher) Email: pseeyap@gmail.com Tel: 6016 4517338

#### 12. SMK Padang Temu

Teacher in Charge: Cikgu Lim (Penolong Kanan PPKI)

Email: huaifun@gmail.com. Tel: 0136108813

#### 13. SK Dato Laksamana Raja Mahkota Teacher in Charge: Cikgu Siti (Resource Teacher) Email: aba5009@moe.edu.my Tel: 6056211899

## Appendix 3: Learning Includes Online Presents and Coverage on Online Media

Website: www.learningincludes.com

Facebook page: https://facebook.com/Includes.my/

Media coverage: Galeri Nasional Mandarin on 28 September 2017 on RTM 3 VIdeo URL: <u>https://www.youtube.com/watch?v=0Cy6rjC4y2U&feature=youtu.be</u>

Learning Includes Video from Yayasan Inovasi Malaysia https://www.youtube.com/watch?v=deErT-nI40A

## **Appendix 4: Beneficiary Contact**

1. 12 Teachers from Special and Mixed Schools

Teacher's Name	School Name	Subject Taught	Tel No
Chua Lay Chung	SMK PK	Perdagangan	0123655807
	Setapak		
Siti suhaila binti	SMK PK	Mathematics	0187764470
Burihan	Setapak		
Chilla binti	SMK PK	Sciences	0198005954
Mohamad	Setapak		
Diali			
Rusiyaton Omar	SMK PK	Pendidikan Islam	0196795732
	Setapak		
Zakaria bin Yahya	SMK PK	Sejarah	0133407580
	Setapak		
Aishah Ramli	SMK PK	Bahasa	01123288346
	Setapak		
Zainab binti Mohd	SMK PK	English	0183764761/0128261761
Nashir	Setapak		
Muspirah Ahmad	SMK PK	Ekonomy	0135135112
Salim	Setapak		
Amir Ikhwanuddin	SKPK Jalan	Bahasa Melayu /	0129471323
bin Sharifuddin	Batu	Guru Data	
Thiayagu a/l	SKPK Alma	Guru Data / ICT	0165438371
Uthaman			
Yap Phaik See	SMK St.	Resource In Charge	0164517338
	George		
Tan Jia An	SMK St.	Resource In Charge	0125996997
	George		

2. Visually impaired/blind Students and students with other disabilities Profile <u>https://drive.google.com/open?id=1pax-vmhkRb9AvsTWKUqx82zb5891r9rw</u>

# **Appendix 5: Beneficiaries Photos**

Drive URL: https://drive.google.com/open?id=1\_W23t\_ekY4LR6CP03RvnSbhhUlv-jjGV