Enhancing Students' Pronunciation Accuracy through Speechnotes Application at MAN 1 Semarang

Meningkatkan Akurasi Pengucapan Siswa Melalui Aplikasi Pidato di MAN 1 Semarang

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Abstract

Automatic Speech Recognition or ASR is used as a part of CAPT or computer-assisted pronunciation training application to improve learners' foreign language in pronunciation. However, nowadays there are many application which adopted ASR technology which one of those is Speechnotes application. Speechnotes application is WellSource creation to make the user recognize their speech accuracy and Speechnotes also used as part of MALL or Moblie Assisted Learning Language. Therefore, this study aimed to enhance students' pronunciation accuracy by using Speechnotes application through classroom action research which were done in three cycles, which every cycle consisted of planning, action, observation, and reflection. The participant were students of XI-1 IPS of MAN 1 Semarang. The data were collected from students result of pronunciation' recording activity by using Speechnotes in every cycle, pre-test, a questionnaire of students' response, field-note to observe students' response, and interview. The instrument had been analysed by using SPSS, which to describe the statistics, sample test, independent simple t-test, validity dan reliability. The result after doing three cycles, students' pronunciation got significant in making mistake precentage. The first cycle got 15.29% mistake words which including homophone and difficult words such as weight, niche and bony. The second cycle got 5.81% mistake words and the last cycle got 2.39% mistake words which in every cycle, the homophones words still could not be interpreted. By filling the questionnaire and interview, 66.3% students agreed to use Speech--notes can improve their pronunciation and students' confidence during learning in the class.

Keywords: Enhancing, Pronunciation, Automatic Speech Recognition (ASR), technology, Speechnotes application

Abstrak

Pengenalan Bicara Otomatis atau ASR digunakan sebagai bagian dari aplikasi pelatihan pelafalan CAPT atau yang dibantu komputer untuk meningkatkan bahasa asing peserta didik dalam pelafalan. Namun, saat ini ada banyak aplikasi yang mengadopsi teknologi ASR yang salah satunya adalah aplikasi Speechnotes. Aplikasi Speechnotes adalah kreasi WellSource untuk membuat pengguna mengenali keakuratan bicara mereka dan Speechnotes juga digunakan sebagai bagian dari MALL atau Moblie Assisted Learning Language. Oleh karena itu, penelitian ini bertujuan untuk meningkatkan akurasi pengucapan siswa dengan menggunakan aplikasi Speechnotes melalui penelitian tindakan kelas yang dilakukan dalam tiga siklus, yang setiap siklus terdiri dari perencanaan, tindakan, observasi, dan refleksi. Peserta adalah siswa XI-1 IPS MAN 1 Semarang. Data dikumpulkan dari siswa hasil kegiatan perekaman pelafalan dengan menggunakan Kartu Ucapan di setiap siklus, pra-tes, kuesioner respon siswa, catatan lapangan untuk mengamati respon siswa, dan wawancara. Instrumen telah dianalisis dengan menggunakan SPSS, yang menggambarkan statistik, uji sampel, uji-t sederhana independen, validitas, dan reliabilitas. Hasilnya setelah melakukan tiga siklus, pengucapan siswa menjadi signifikan dalam membuat persentase kesalahan. Siklus pertama mendapat 15,29% kata kesalahan yang termasuk homophone dan kata-kata sulit seperti berat badan, niche dan tulang. Siklus kedua mendapat 5,81% kata kesalahan dan siklus terakhir mendapat 2,39% kata kesalahan yang dalam setiap siklus, kata-kata homofon masih belum bisa diartikan. Dengan mengisi kuesioner dan wawancara, 66,3% siswa setuju untuk menggunakan Pidato - catatan dapat meningkatkan pengucapan dan kepercayaan diri siswa selama belajar di kelas.

Kata kunci: Peningkatan, Pengucapan, Pengenalan Bicara Otomatis (ASR), teknologi, aplikasi Catatan Pidato

PENDAHULUAN

Pronunciation is one of language element to be learnt as the foreign learners to get better communication. Moreover, learners should speak clearly with right pronunciation, so the message will be delivered and will be received well as the sender means, but school or teacher does not provide pronunciation as one of the material which should students learn in the class. Those statements had been said by the teacher that pronunciation was not essential lesson to be learnt. The other reason after doing pre-observation by interviewing English teacher and the students about teaching pronunciation in school. The first problem was, there was no curriculum mentioning about teaching pronunciation in the class, so that teacher also thought that teaching pronunciation in the class was not really necessary. The second concern was, there is no enough time to teach pronunciation when there was much material to be taught in 90 minutes and there was no tool to learn pronunciation. However, teacher still gave the correction in two or three words to students. This case has ever been mentioned by Gilakjani (2016) in his journal, English Pronunciation instruction is difficult for some reasons. Teachers are left without clear guidelines and are faced with contradictory practices for pronunciation instruction. There is no well-established systematic method of deciding what to teach, when, and how to do it. As a result of these problems, pronunciation instruction is less neglected and teachers are disregarded in teaching pronunciation in their classes.

Based on that condition, I thought about using ASR technology in teaching pronunciation is quite effective, because ASR itself is used as a part of CAPT or computer-assisted pronunciation training application to improve learners' foreign language in pronunciation (Golonka, 2014) and ASR has been proved by many people can make the learners improve their pronunciation. This action was being considered by me to teach pronunciation in easy and interactive ways, so students can learn pronunciation by themselves or with the teacher in the class. One of the ASR technology that I choose in this research is Speechnotes application which was created by Wellsource in 2018, this apps were really light and take little space on mobile phone users. Speechnotes application could detect speech and interpret to text. This application also called Mobile Assisted Language Learning (MALL). Mobile learning is brought to the light diverse methods and techniques to assist language learning and learning in general (Gholami & Azarmi, 2012). Mobile device was being considered by Miangah and Nearat (2012) as an extension, but not a substitution for existing learning devices.

The weakness of this apps is not able to recognize homophone words or the words which have the same spell, so that beside I asked students to use Speechnotes to detect their speech, I asked students to record their voice to make sure that they speech were accurate on those given words. Speechnotes application is quite different with other ASR technology which is used in Computer Assisted Language Learning or CALL provide correction and students' mistake percentage. So, I was doing the correction and students' achievement by manual in counting students' mistake words on every cycle.

METODE

Research is a process of steps used to collect and analyse information to increase our understanding of a topic or issue (Creswell, 2012). In this kind of case, I chose action classroom research as a research design. Action research is a form of self-reflective enquiry

undertaken by participants in social (including educational) situations in order to improve the rationality and justice of (a) their own social or educational practices, (b) their understanding of these practices, and (c) the situations in which the practices are carried out. It is most rationally empowering when undertaken by participants collaboratively, though it is often undertaken by individuals, and sometimes in cooperation with 'outsiders' (Kemmis, 2008). This research use 3 cycles consist of observing, action, planning and reflecting.
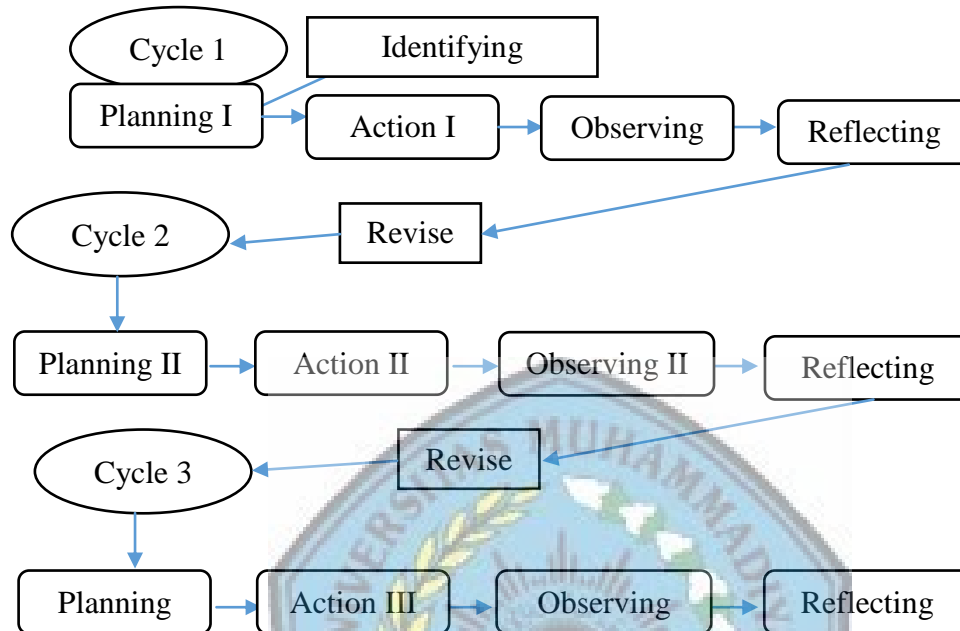
RESEARCH FINDINGS AND DISCUSSIONS

1. Students' Pronunciation Enhancement Accuracy by Using Speechnotes Application.

Learning and teaching pronunciation could be so challenging either for students or for teacher. Finding the right tool and media might help students in understanding and learning pronunciation such as Speechnotes application which is provided speech recognition to know whether our speech was right or not. To get the result and students' response. I did three times meeting or cycle accordant the procedures which are planning, action, observing, and reflecting.

1.1 The Implementing of Speechnotes Application in Teaching Pronunciation

1.1.1 Cycle I

In the first cycle, implementing Speechnotes in teaching pronunciation was quite difficult for some reasons. the first was, students could not understand well about the apps so, I had to guide them one by one to use th apps and gave the instruction to them. The second was, the class was in a big scale, so I could not make the teaching process became conducive. From the the problem above I could make conclusion that Speechnotesa application could not use in big scale class or maximum students were only 15-20 people.

1.1.2 Cycle II

In this cycle, I got more revise from the first cycle, to make more effective in teaching pronunciation to students. I gave them video audio native speaker and I asked them to listen carefully and practiced it with their desk mate. After they understood about the instruction and used to with the words, I asked them to start practicing by record their voice with Speechnotes application. The result of this action was bit successfull either from students' attention or students' result. Even though, I had still to give guidance for some students because they still could not operate the apps well.

1.1.3 Cycle III

After getting usual with the apps, teaching pronunciation became more effective and easy, even all students got more confident in practicing their pronunciation by using Speechnotes application. With this condition, I gave students lesson about basic vowel and diphtong also how to read the phonetic symbol. I took this action because Speechnotes did not provide correction so, students had to aware with their pronunciaton and made sure that what they said was correct.

For making an conducive class in teaching pronunciation by using Speechnotes was, made stuents to get used to with the apps so, they could operate the apps without helping from the teacher. Also if they understood how to use the apps well, they could learn pronunciation independently inside or outside the class.

1.2 The Percentage of Students' Enhancement Accuracy from C1 to C3

After passing all the steps of pre-test, cycle 1 to cycle 3 which are planning, action, observation and reflection. I got the data of students' enhancement percentage cycle by cycle

Graphic 1. Result of Students Pronunciation From Pre-cycle to Post-Test 3

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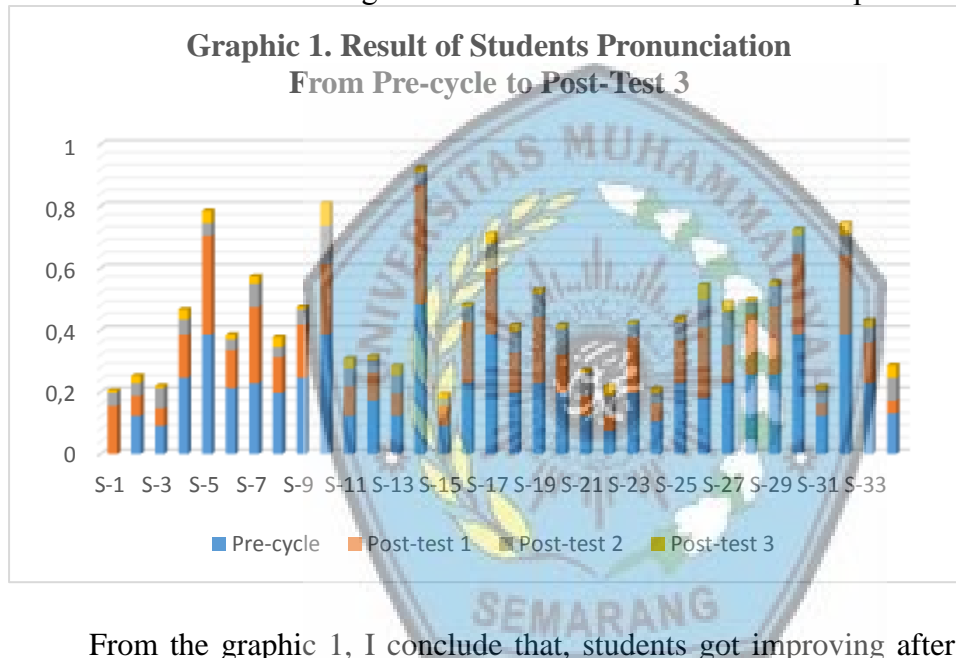
From the graphic 1, I conclude that, students got improving after doing three times recording by using Speechnotes application. If we see the graphic 1, in the cycle 1 there are still much students who make mistake in pronouncing words approximately got 15.29 % average students. The result in the first cycle was quite good because in the first cycle, students have to read the text based on their knowledge in pronouncing the words. 15.29% it means students only got 19 mistake words from 122 words. The second cycle, I give students treatment before they started reading the text which was giving them the video audio of native speaker. So that, they could listen the audio first and practice to pronounce the words as the native said in the audio. The treatment was successful which gave students improvement in pronouncing words and the mistake words were lesser than the first cycle which got 5.81% from average students. The last cycle, mistake words only got 2.39% from average students by teaching them the phonetic symbol and drilled some common mistake words.

1.3 The Frequency of Students' Mistake Words from Cycle 1 to Cycle 3

Speechnotes application was quite suitable in learning pronunciation neither learning in the class nor learning independently. This reason based on students' enhancement from cycle 1 to cycle 3, the enhancement was significant and the frequency mistake words were getting lesser

cycle by cycle.

Table 1. The list of mistake words from C1 to C3

C1	C2	C3
Bear	Although	Weight
Weight	Bear	Sea
While	Size	Paws
Although	Paws	Ice
Cold	Ice	Cold
Size	Sea	-
Occupy	Much	-
Maritime	To	-
Hence	Cold	-
Niche	Weight	-
Bony	-	-
Sea	-	-
Seals	-	-
Much	-	-
Water	-	-
Arctic	-	-
Female	-	-
Ecological	-	-

Table 1 shows the significant improvement from cycle 1 until cycle 3. This enhancement was followed by the treatment I gave to the students. Which was after listening to the native audio and practice the words continuously. Some students got better with their pronunciation and the last cycle shows that only five words mistaken which is included homophone words.

1.4 The Common Mistake Words

As the learner of foreign language in mispronouncing the words could be so common in our daily life. Without learning how to pronounce the word properly might be so distress and automatically students never know the right pronunciation for some English words. This case also happened in MAN 1 Semarang, especially at grade XI-1 IPS.

Table 2. List of Common Mistake Words

The Words	Students' pronouncing/ Speechnotes interpretation
Bear	Bir
Weigh	Week
While	Whale
Cold	Called
Time	Tim
Occupy	Occupi
Meaning	Mening
Diet	Did
Hence	Has
Hunt	Hun
See	Sea
Size	Sis
Seals	Sale
Paws	Pause
Water	Weather

Niche	Nice
Bony	Bunny
Ice	Eyes

The words in Table 2 was the accumulation of the most often mispronounced by students from cycle 1 to cycle 3. If we could see there were many common words that we always says in our daily activity, but we still could not differ the proper pronounce. It could be concluded that in learning pronunciation needed more practice and validated from dictionary or teacher whether the words we spelled was correct or not.

1.5 The Homophone Words

The other matter of common mistake words were the homophone and homograph terms become the main concern in teaching pronunciation during the treatment I gave from the first cycle to the third cycle. Not only because the students could not differ in pronouncing has the homophone word but also because Speechnotes application could not recognize students' speech when it comes to homophone words. So, the results of students' accuracy were decreased in those words.

Table 3. The Homophone Words.

The words	Speechnotes Interpretation
Sea	See
It	Eat
To	Two
Ice	Eyes
Cold	Called

2. The Students' Response Learning Pronunciation by Using Speechnotes Application

The response was got from interview and questionnaire. Those instruments were chosen for knowing students' perspective about using Speechnotes application in learning pronunciation. The result of questionnaire got 66.3% that revealed the application could rise students' confidence in speaking English. The interview sheets showed many of students' expression towards using Speechnotes application in learning pronunciation. They felt that the application helped them in learning pronunciation easier and more efficient. Even though, the application still much of lack deficiencies in the correcting system. The application was only interpreting speech without correcting the right pronunciation.

CONCLUSION AND SUGGESTIONS

1. Conclusion

Speechnotes could improve students' pronunciation accuracy and help students in learning pronunciation either in the class or outside the class. The data show that some student got better in every cycle and the mistake words got 15.29% in the first cycle, 5.81% in the second cycle and 2.39 in the last cycle. Even though, the application could not interpreted the homophone words because the apps could not recognize the words which almost spell the same with other words such as eyes/ice, see/sea, called/cold and so on. Students' response after using Speechnotes application as the tool of learning pronunciation got 66.3% from questionnaire sheets, which students thought that the application was quite helping them in learning pronunciation and helping them in recognizing mistake words.

2. Suggestions

Based on the conclusion above, I suggest some points that might be useful for the teacher and other researcher:

1. English teachers can use Speechnotes as the tool to help teaching pronunciation.
2. Speechnotes application could be recommended tool for students in learning pronunciation independently and increasing their pronunciation.
3. Speechnotes application could be used as tool for learning pronunciation only for small class with the maximum students is 20 people.
4. Speechnotes application did not provide correction, so the next researcher can find the application which can provide more detail function in detecting speech.

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