APPENDIX 1

EFL PRE-SERVICE TEACHERS' VIEWS AND UNDERSTANDING OF TPACK DURING MICROTEACHING PERFORMANCE

Construct	Construct Reference	Conceptual Definition	Component	Interview Question
Technological Pedagogical Content Knowledge (TPACK)	**Koehler, 2006**	Technological Pedagogical Content Knowledge (TPACK) is one model of framework that integrates the three components in it including content, pedagogy and technology (Mishra & Koehler, 2006).	Technology	1. Is it important to integrate technology, pedagogy, and content together into your teaching? Why? What did you think of it? 2. What types of technology that you used to teach in your teaching practice? 3. How did you believe those types of technologies could maximize your students' learning? 4. Were those technologies helpful for your students? How helpful it is? 5. Were those technologies challenging for your student? How challenging it is? 6. How did you minimize

					those challenges?
			Pedagogy		7. What is your strategy in combining the knowledge of technology, pedagogy, and content into your teaching? Why did you combine those strategies in such a way?
			Content		8. How did you include content of ELT into your teaching?
					9. How did you think the content (you have mentioned) in ELT would facilitate your students' language learning? in what way?
Microteaching in Teacher Education	Wallace, 1991	Microteaching is a short teaching session with limited people involved and more simplified aspects applied. Microteaching occurred in three or four distinct	*The Briefing* (of Microteaching with TPACK Implementation)		10. How did you prepare your teaching with TPACK in mind?
					11. Did you find any difficulty during preparing your teaching while implementing TPACK

	stages: 'the briefing', 'the teach', 'the critique', and 'the reteach'. (Wallace, 1991).	framework? What are they? Explain! 12. How did you overcome those difficulties?
	'The teach' (of Microteaching with TPACK Implementation)	13. How did you teach your students while implementing TPACK framework in the class?/What kind of activities did you use? 14. How did TPACK framework facilitate your teaching? 15. Did you think those opportunities (you have mentioned) while implementing TPACK framework have helped achieve your teaching-learning objectives?/ have helped your students to learn better?
	The critique (of	16. How was the teaching

	Microteaching with TPACK Implementation)	evaluation done in your microteaching class with regard to your use of TPACK framework in your teaching practice sessions?
		17. What kinds of feedback did you get from your peers or lecturer after implementing TPACK framework in your teaching?
	'The reteach' (of Microteaching with TPACK Implementation)	18. How did you prepare your second teaching practice as you re-implement the TPACK framework?
		19. How was your teaching practice of re-implementing the TPACK framework in this stage? Did it reach the criterion or met the evaluator's expectation?

How?

20. Overall, based on your knowledge and experiences, what would make of an effective TPACK implementation?

INTERVIEW TRANSCRIPTION 1

Transcription 1

Respondent   : EFL Pre-service Teacher A
Time   : 14.06-14.50
Date   : Monday, 10th September 2018
Place   : Central Library of Islamic University of Indonesia

I : Interviewer, **R** : Respondent

Subject	Line	Transcription	Theme	Coding
I		Is it important to integrate technology, pedagogy, and content together into your teaching? Why? What did you think of it?		
R	1	In my ipinion, this is very important. In this advanced era teachers must implement technology in learning and technology must be implemented simultaneously and synchronously among technology, pedagogy and content, so that learning eee the goals can be achieved well.	Technology Knowledge	**I/1/TPACK.TK/1**
I		Other than that?		
R	2	Eee what, I think enough		
I		What types of technology that you used to teach in your teaching practice?		

R	3	The technology that I used yesterday such as PPT, if I used PPT surely it followed by LCD and projector, speaker. Is video included?	Technology Knowledge	**I/1/TPACK.TK/3**
I		Yes		
R	4	Eee video and picture. Because of my voice is loud enough therefore I did not need a microphone	Technology Knowledge	**I/1/TPACK.TK/4**
I		Did you use audio?		
R	5	Audio…use the speaker right?	Technology Knowledge	**I/1/TPACK.TK/5**
I		Yes, is that all?		
R	6	Yes		
I		How did you believe those types of technologies could maximize your students' learning?		
R	7	Yes. If I did not use that I have to explain more maximal. Because the technology helped me for example…may I tell you?	Technology Knowledge The Perceived Benefits of TPACK Implementation	**I/1/TPACK.TK/7** **I/1/TPACK.BF/7**
I		Sure		
R	8	For example, yesterday was about 'announcement' I gave an example like a real example of announcement and it must required a technology. Well, yesterday I implemented eee the real example of announcement such as the pictures of announcement where it should be	Technology Knowledge The Perceived Benefits of TPACK Implementation	**I/1/TPACK.TK/8** **I/1/TPACK.BF/8**
I		And then how about the PPT itself?		
R	9	PPT is very helpful, because it helped me and my	Technology Knowledge	**I/1/TPACK.TK/9**

		students. From me as the teacher, I wrote the points eee therefore it helped me to remember if I forget what I need to explain and helped me to be fluent in explaining what I need to explain. As the students they can know *"oh Mr. Ardan is explaining the points in the PPT"* I mean they can understand the points and its explanation through my oral explanation	The Perceived Benefits of TPACK Implementation	**I/1/TPACK.BF/9**
I		Okay, how about the video? Did you use it?		
R	10	Yes, I used it		
I		How?		
R	11	I used the video for ice breaking		
I		Ice breaking, what types of ice breaking did you use?		
R	12	But the video is for cycle 1		
I		Oh for cycle 1. How about cycle 2 and cycle 3?		
R	13	No		
I		Oh you did not use video? Only audio and PPT?		
R	14	Yes		
I		Were those technologies helpful for your students? How helpful it is?		
R	15	Yes, it helped me…like I have explained earlier because…if I did not use the technology, if I did not use the media, they would be more…I need to be more extra in explaining. Meaning it as the real example. Such as *"the example of announcement is like this…"* and then	Technology Knowledge The Perceived Benefits of TPACK Implementation	**I/1/TPACK.TK/15** **I/1/TPACK.BF/15**

		for poem I gave example with eee a picture so they can understand what does it imply when they worked on it. As the assignment, I gave two pictures and they should make a poem based on the picture I have given		
I		I see, meaning that it was more visual?		
R	16	Yes, more visual	Technology Knowledge	**I/1/TPACK.TK/16**
I		Were those technologies challenging for your student? How challenging it is?		
R	17	What was the difficulty? If yesterday the problem was because the audio did not work well	Technology Knowledge	**I/1/TPACK.TK/17**
I		Was it come from the tool?		
R	18	Technical. Yes, technical problem		
I		Other than technical problem?		
R	19	Is it from the media?		
I		Yes		
R	20	I think there is no		
I		There is no?		
R	21	There is no		
I		Okay, meaning that there were a lot of positive effects, is not it?		
R	22	Yes		
I		Okay, and then What is your strategy in combining the knowledge of technology, pedagogy, and content into your teaching? Why did you combine those strategies in		

		such a way?		
R	23	Eem what did you mean by the strategy?		
I		So, how did you combine the right technology with the right teaching that will you perform? While the language function was also can be achieved as well		
R	24	Eee my strategy ya..is that included such as in teaching method?		
I		Yes		
R	25	Ooh…example of the method characteristics? What did I use or how?		
I		Eee in this case the strategy in general, so how did you choose the technologies that suit your teaching so that the teaching objective is achieved?		
R	26	Ohh…if yesterday my strategy was…due to my first topic is announcement so, to choose the appropriate media in announcement I have to display the real example of announcement, after that because it can help students in understanding what is announcement?, I mean eee students can know the types of announcement such as announcement in the airport, announcement in the hospital, announcement in the school etc. what else?	Pedagogy Knowledge	**I/1/TPACK.PK/26**
I		And then, why did you use that strategy?		
R	27	Because it can help the process of teaching…in the process of teaching and learning activities	Pedagogy Knowledge	**I/1/TPACK.PK/27**

I		Other than that?		
R	28	Other than that…eem I think enough the main important is the goal can be achieved	Pedagogy Knowledge	**I/1/TPACK.PK/28**
I		Is there any specific strategy that you…eee you use in cycle 2 and cycle 3 where it different with the cycle 3?		
R	29	Eee is that regarding to TPACK? From the perspective of TPACK?		
I		Eem		
R	30	I think there was no different		
I		This is not to…		
R	31	No, because the media that I used were the same, I used PPT, audio and the media that I used have the same usage	Technology Knowledge	**I/1/TPACK.TK/31**
I		Meaning that you adjust with the material that will you teach?		
R	32	Yes		
I		How did you include content of ELT into your teaching?		
R	33	If yesterday the example was eee about announcement eee so students can know how is the announcement delivered by native speakers so students can understand it	Content Knowledge	**I/1/TPACK.CK/33**
I		Is it listening skill?		
R	34	Yes		

I		Only listening?		
R	35	Listening and speaking, because from the previous activities I gave them example and then I asked them to make an announcement later eee they worked in a group then one student from each group came forward to read the announcement	Content Knowledge	**I/1/TPACK.CK/35**
I		How about the skill in 'Poem'?		
R	36	The skill is speaking	Content Knowledge	**I/1/TPACK.CK/36**
I		Speaking, how did you deliver eee the language function?		
R	37	Firstly, eee I explained what are the structures of poem and then I gave the examples of poem, I gave guessing activity for example I showed a picture of a broken car and I showed a picture of love and then I asked students to guess what was it imply and what it would be if the pictures were combined ?	The Perceived Benefits of TPACK Implementation	**I/1/TPACK.BF /37**
I		Is it about the title?		
R	38	Yes, after that students were guessing. When they finished guessing and have their answers, I showed the poem about 'love is a broken car' and then students have to make a poem related to the picture	The Effectiveness of TPACK Implementation	**I/1/TPACK.BF /38**
I		So, in the end of meeting they…produced it by themselves?		
R	39	Yes		

I		Did they achieve the speaking skill?		
R	40	Yes, they achieved it. In addition, I gave students a picture of a kid then they were required to describe that kid through a poem	Content Knowledge The Perceived Benefits of TPACK Implementation	**I/1/TPACK.CK/40** **I/1/TPACK.BF/40**
I		Meaning that the picture was already provided then students were asked to create by themselves?		
R	41	Yes		
I		How did you think the content (you have mentioned) in ELT would facilitate your students' language learning? in what way?		
R	42	Eeh it facilitated because I gave examples about a poem. Also, I taught and explained what are the structures of poem and I think it could be facilitate this…eee students' language learning in language because what…they already known how are the structures and then I also gave examples of poem that I have explained	Content Knowledge	**I/1/TPACK.CK/42**
I		Meaning that the advantage is achieved?		
R	43	Yes		
I		Okay, in Microteaching…before you begin what…the teaching practice there was a briefing from the lecture about how will be the teaching practice done in the class and what are the skills needed eee so, the question is		

		How did you prepare your teaching while implementing TPACK framework?		
R	44	At the time I eee we have conducted the briefing with Ms. she said *"in the cycle 2 you have to use technology"*. After that eee I prepared, firstly I look at YouTube. Looked at YouTube what are the proper material	*The Briefing* (of Microteaching with TPACK Implementation)	**I/1/MTE.BR/44**
I		Oh…so the material is from you?		
R	45	Yes, from me		
I		Not from the lecture?		
R	46	No		
I		Okay		
R	47	The materials are from us. After that I looked the material which I think I expert in it I mean I have already mastered it, then if I have got the material I made the lesson plan, I looked the suitable media to help me in teaching	*The Briefing* (of Microteaching with TPACK Implementation)	**I/1/MTE.BR/47**
I		And then…how long did you prepare your lesson plan?		
R	48	Cycle 2 or cycle 3?		
I		Both cycle 2 and cycle 3		
R	49	If the cycle 2 was about two days	*The Briefing* (of Microteaching with TPACK Implementation)	**I/1/MTE.BR/49**

I		Two days		
R	50	If the cycle 3 was about two to three days	*The Briefing* (of Microteaching with TPACK Implementation)	**I/1/MTE.BR/50**
I		Meaning that you did not prepare it for example tonight for your teaching tomorrow? No?		
R	51	No		
I		Okay, eee did you find any difficulty during preparing your teaching while implementing TPACK framework? What are they? Explain!		
R	52	If about announcement I found difficulty in looking the examples, because as stated by Ms. that eee we should not give only one example…I mean if I give example, I can not only use the example in the airport I should use other announcements. To find the example because for example I look for example A then example B should be different but similar with example A. that is quite difficult	*The Briefing* (of Microteaching with TPACK Implementation)	**I/1/MTE.BR/52**
I		Ohh I see, is there other than finding an example of announcement?		
R	53	I think no, if making PPT was easy and editing video because it was easily to find in any hand phone applications	*The Briefing* (of Microteaching with TPACK	**I/1/MTE.BR/53**

			Implementation)	
I		Yes		
R	54	And then eeem I think there is no		
I		That is. Meaning that in finding a sample		
R	55	Yes, sample		
I		And how did you overcome those difficulties?		
R	56	Eee I keep looking	*The Briefing* (of Microteaching with TPACK Implementation)	**I/1/MTE.BR/56**
I		You look it until you find it? Just it?		
R	57	Yes		
I		How did you teach your students while implementing TPACK framework in the class?/What kind of activities did you use?		
R	58	If the method I prefer to for example use CLL method so, I did not just stand in the front, explain and scream to explain, but I walked around and always checking students' understanding and walk around while asking *"have you understood?"* after that eee when they do the task I asked if they have understood my explanation or not and eee what is the name..that is	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.TC/58**
I		May I know what activities that you use when teaching in cycle 2 and cycle 3?		

R	59	The activities if in cycle 2 what…the first is announcement I explained what is announcement, the main important is related to announcement. What is announcement and then where usually announcement is made and then announcement is consist of three, there are 3 points the first is announ…to whom it is made for, what is the event and what else…I forgot the last point. After that, I explained about that then I gave example, gave example about the announcement then after giving the examples I asked them to be volunteer to read the announcement then I gave a task for them to make announcement	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.TC/59**
I		Okay		
R	60	For the cycle 3 the activity were same for example I explained what are the points, I gave example of the poem and there was guessing, after that I gave pictures and they should describe the picture through poem	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.TC/60**
I		Meaning that the activity consist of collaboration?		
R	61	Yes		
I		Group discussions?		
R	62	Oya with this what is the name… for the task I usually do not give for individual but group	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.TC/62**

I		Oh group both in cycle 2 or cycle 3?		
R	63	Eeh		
I		Okay. Were they engage or not with the activities that you used?		
R	64	I think yes		
I		Yes. How engage? Can you describe?		
R	65	What…for example I asked *"who wants to read?"* and then they were not shy and silent. They immediately raised their hands and then for example when I asked to describe the picture of kid and give time after that *"what is your poem?"* They directly answered without being shy, and then *"try to read!"* then they directly read without feeling shy and silent	'*The Teach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.TC/65**
I		Meaning that they were active?		
R	66	Yes		
I		Okay, and then How did TPACK framework facilitate your teaching improvements?		
R	67	Yeah like before eee if used the media I mean if the teaching was just normally only used paper and oral I think I need to be extra in explaining because of the media firstly it helped, it helped me in explaining and then the second, the student could easily understand because there are examples I mean they for example in announcement it…I used what is the name that I show	Technology Knowledge The Perceived Benefits of TPACK Implementation	**I/1/TPACK.TK/67** **I/1/TPACK.BF/67**

		to the students then if I did not use it I need to be extra in explaining		
I		The main important what is the more effective, is not it?		
R	68	He eh		
I		Okay. And then in your opinion the advantages that have you what…that have helped you in improving the teaching improvement is that helped you or not to achieve the learning objectives?		
R	69	Yes		
I		How?		
R	70	Because eee the evidence is students, when I gave them assignment they can work on it while their work were correct I mean the goals are the students are able to eee make a poem and in the end of learning the students could make a poem and I mean eee they made that poem based on the structures that I have explained and that is	Content Knowledge	**I/1/TPACK.CK/70**
I		How about in announcement?		
R	71			
		If in announcement as same as poem in the end of learning students can make announcement that eee consist of 3 contents eee the first is for whom, what is the event, and the other one I forgot the main thing is	Content Knowledge	**I/1/TPACK.CK/71**

		they can make announcement based on what I have explained		
I		Okay yes. And then in the critique How was the teaching evaluation done in your microteaching class with regard to your use of TPACK framework in your teaching practice sessions?		
R	72	If yesterday the feedback was from the lecture that if in announcement because the examples of announcement are still less	*The Critique* (of Microteaching with TPACK Implementation)	**I/1/MTE.CR/72**
I		I see		
R	73	He eh		
I		And then?		
R	74	Eem if in poem what yeah maybe if in TPACK maybe just it and yesterday I think there was a critique that the writings on PPT were very bright	*The Critique* (of Microteaching with TPACK Implementation)	**I/1/MTE.CR/74**
I		Is that from Ms.?		
R	75	From the students from the students from my friends	*The Critique* (of Microteaching with TPACK Implementation)	**I/1/MTE.CR/75**
I		And then?		
R	76	And then eem what else if from TPACK I think just it if		

		from except TPACK for example my teaching was a bit too fast		
I		And then?		
R	77	And then eee what just it		
I		That, and then meaning that after teaching for example cycle 2 was done continued with the feedback session		
R	78	Yes		
I		In what form was the feedback?		
R	79	Comment	*The Critique* (of Microteaching with TPACK Implementation)	**I/1/MTE.CR/79**
I		Just oral?		
R	80	Ha ah		
I		Not		
R	81	Not		
I		Did not use such as form?		
R	82	No, but for example this in final assignment there was a peer assessment the form of feedback was in forms		
I		Is that for final exam?		
R	83	Yes		
I		Meaning that you gave feedback to your friends in whole class?		
R	84	No, in pair		

I		Oh in pair?		
R	85	Pair		
I		Meaning that your friend gave you and your friends also gave…		
R	86	Yes that was for final exam but if after the immediate teaching they were free to comment anyone	*The Critique* (of Microteaching with TPACK Implementation)	**I/1/MTE.CR/86**
I		Oke, it means oral right. And then if last time you have received feedback then if for the third cycle or second teaching how did you prepare your second teaching practice as you re-implement the TPACK framework?		
R	87	Yeah if in this second Ms. told eee the lecture told the examples were still less. Then here I have to be really gave example that for me can make students really understand. Yeah the example such as the first example and then the second I made picture so that students can guess the aim of guessing is to make me easy in checking that student have really understood or not. And then just it	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.RT/87**
I		Just it? Nah How was your teaching practice of re-implementing the TPACK framework in this stage? Did it reach the criterion or met the evaluator's expectation? How?		

R	88	Is this the second? Cycle 2?		
I		The cycle 3		
R	89	Oh cycle 3		
I		For re-teach		
R	90	Eee, yes		
I		Yes how? Was it reached expectation?		
R	100	Yes	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.RT/100**
I		How was the achievement?		
R	101	Because that students I mean the goals were achieved, I mean the goals in my lesson plan were all achieved	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/1/MTE.RT/101**
I		If from the lecture? Is there a comment?		
R	102	Yes, there is but I forgot		
I		Okay, just it?		
R	103	He eh		
I		And then, overall based on your knowledge and experiences, what would make of an effective TPACK implementation?		
R	104	Eee the important thing is this if we want to use any media just adjust it with the needs, adjust it with	Technology Knowledge	**I/1/TPACK.TK/104**

		students, I mean is that media can be accessed or not by the students. For example I want to use this quiz base internet and then but if I use it in the class with no internet connection it cannot worked. Yeah the main this is if we want to use any media adjust it with the needs and is students access it or not
I		Yes, did you use any application?
R	105	Nope
I		May I know why?
R	106	I did not think about it
I		Oh I see. I mean the internet connection if we want to say is support
R	107	Yes
I		Ohh meaning that this is which has less negative impact is not it?
R	108	Yes
I		Okay, just it?
R	109	Yes

INTERVIEW TRANSCRIPTION 2

Transcription 2
Respondent   : EFL Pre-service Teacher B
Time   : 10.15-10.45
Date   : Tuesday, 11th September 2018
Place   : Islamic Boarding School of UII

I : Interviewer, **R** : Respondent

Subject	Line	Transcription	Theme	Coding
I		Is it important to integrate technology, pedagogy, and content together into your teaching? Why? What did you think of it?		
R	1	If I think it is important, eee because when we teach students what eee became what combining technology, pedagogy and content into one that eee if I think it can make students interested eee for example when we teach students by using PPT and video eee the students would feel interested so we learnt not only through listening the teacher when the teacher is speaking, so they also learnt through PPT and video. So, I think to combine technology, pedagogy and content becomes one is important	Technology Knowledge	**I/2/TPACK.TK/1**
I		If it was the case from students, how about you? From the the teacher?		

R	2	If from me the important thing is it can help teacher to deliver the material so it did not only through what…speaking so through technology	Technology Knowledge	**I/2/TPACK.TK/2**
I		What types of technology that you used to teach in your teaching practice?		
R	3	Eee the technologies that I used are PPT and video	Technology Knowledge	**I/2/TPACK.TK/3**
I		Just it?		
R	4	Yes		
I		You did not use such as microphone?		
R	5	Oh yeah I used microphone, computer	Technology Knowledge	**I/2/TPACK.TK/5**
I		You used LCD right?		
R	6	Yes LCD	Technology Knowledge	**I/2/TPACK.TK/6**
I		How about whiteboard?		
R	7	Yes, but in cycle 1		
I		Oh the first cycle. You did not use it in cycle 2 and cycle 3?		
R	8	No		
I		Okay, meaning that PPT, audio, video, LCD. And then how did you believe those types of technologies could maximize your students' learning?		
R	9	Yes how…I did not really believe	Technology Knowledge	**I/2/TPACK.TK/9**
I		How?		
R	10	Because when I teach by displaying PPT it sometimes they were still unclear they still asked	Technology Knowledge	**I/2/TPACK.TK/10**

		"how about this?" and then so if I think I still did not believe		
I		You did not believe?		
R	11	Yes, I still did not believe what technology…		
I		With the use of those technologies?		
R	12	Yes, it was not maximal yet	Technology Knowledge	**I/2/TPACK.TK/12**
I		May I know how did you choose the technology before teaching?		
R	13	The way?		
I		E eh		
R	14	The way was by adjusting it with the needs	Technology Knowledge	**I/2/TPACK.TK/13**
I		How?		
R	15	Students' needs the need of material that I teach. Yes for example in cycle 2 what speaking that I used video, so I showed the video and then later they eee wrote what in the video and then practiced it	The Perceived Benefits of TPACK Implementation	**I/2/TPACK.BF/15**
I		I see		
R	16	Yes		
I		How about the audio?		
R	17	Audio…		
I		Did you use audio?		
R	18	I think no		
I		No. how about PPT?		
R	19	If PPT eee I displayed it and then later asked them to	The Perceived Benefits	**I/2/TPACK.BF/19**

		see, I asked them to read but sometimes they still did not understand yet what I displayed sometimes there were still many I mean how	of TPACK Implementation		
I		So you re-explain it again?			
R	20	Yes			
I		Okay, and then were those technologies helpful for your students? How helpful it is?			
R	21	Yes InsyaAllah it helpful	Technology Knowledge	**I/2/TPACK.TK/21**	
I		How helpful?			
R	22	Eee it helpful eee so they did not just fixate on what I talked about, but they also what eee they also what could see from the PPT and video that I displayed so, they….I confuse. So, I think it through PPT and video	Technology Knowledge	**I/2/TPACK.TK/22**	
I		Did you think it is helpful or quite helpful?			
R	23	Eee it is quite helpful	Technology Knowledge	**I/2/TPACK.TK/23**	
I		Oh it is quite helpful			
R	24	Yes			
I		If before was about the advantages, now were those technologies challenging for your student? How challenging it is?			
R	25	What kind of challenges?			
I		Such as the difficulties			
R	26	The difficulties in terms of...			

I		The technology		
R	27	Eee I think there was no difficulty	Technology Knowledge	**I/2/TPACK.TK/27**
I		There is no?		
R	28	I think there is no		
I		There is no? it means more to the advantages is not it?		
R	29	Yes		
I		Okay. What is your strategy in combining the knowledge of technology, pedagogy, and content into your teaching? Why did you combine those strategies in such a way?		
R	30	Eee I fitted the lesson plan with what I teach. In the cycle 2 I…in the cycle 2 and cycle 3 I fitted the technology, pedagogy and content I adjusted them	Pedagogy Knowledge	**I/2/TPACK.PK/30**
I		How did you include content of ELT into your teaching?		
R	31	I do not understand yet		
I		For example you teach descriptive text and how about the focus for? And then was the teaching…?		
R	32	Oh this is about both or not? Cycle 2 and cycle 3?		
I		Yes		
R	33	If in cycle 2 I more focused on speaking so I taught…I gave a video and then they eee I asked them to write what such as about that asking and	Content Knowledge *'The Teach'* (of Microteaching with	**I/2/TPACK.CK/33** **I/2/MTE.TC/33**

				TPACK Implementation)	

Speaker	No.	Text	Category	Code
		giving opinion then later they were in pairs like asking and giving opinion to their friends and after that they came forward to practice. Is that correct? I forgot the cycle 2. Then in cycle 3 eee I gave them worksheets in group later they described for example Borobudur and then what eee yesterday was about Panda and then beach if in cycle 3 I was focused on writing I think		
I		Oh writing. Is there in the lesson plan?		
R	34	There is		
I		And then How did you think the content (you have mentioned) in ELT would facilitate your students' language learning? in what way?		
R	35	I still do not understand yet eee what…		
I		If in the previous you have mentioned what are the skills in your opinion how were the skills helped students that you taught to master the speaking what was…writing		
R	36	Eee I am confuse how to answer		
I		It is okay. It helped in what terms?		
R	37	It helped in terms of...terms of speaking and writing	Content Knowledge	**I/2/TPACK.CK/37**
I		How?		
R	38	O yeah with the practice is not it, in the cycle 2 it helped students to eee improve their speaking and	Content Knowledge	**I/2/TPACK.CK/38**

		then in the cycle 3 was writing yeah in improving students' writing		
I		Did you think it was achieved? I mean their speaking and writing were improved?		
R	39	they got it, achieved	Content Knowledge	**I/2/TPACK.CK/39**
I		How…because?		
R	40	Yeah because their speaking was good so I think it achieved. Also, I think there was no obstacles anymore	Content Knowledge	**I/2/TPACK.CK/40**
I		I see		
R	41	Yes, they were able in writing too	Content Knowledge	**I/2/TPACK.CK/41**
I		Did you check it at the end?		
R	42	Yes I checked	Content Knowledge Pedagogy Knowledge	**I/2/TPACK.CK/42** **I/2/TPACK.PK.42**
I		Okay, how did you prepare your teaching while implementing TPACK framework?		
R	43	The context of TPACK eee before…how I am confuse, I prepared the lesson plan in terms of what…PPT	*The Briefing* (of Microteaching with TPACK Implementation)	**I/2/MTE.BR/43**
I		Media, yes like that		
R	44	Yeah the first I prepared the flash disk, prepared PPT	*The Briefing* (of Microteaching with TPACK	**I/2/MTE.BR/44**

			Implementation)	
I		Did you make the PPT by yourself?		
R	45	Yes, I made the PPT by myself and then I displayed it		
I		Eee what is the name…there are many ways in choosing the material for example there are many asking and giving opinion, where did you find it?		
R	46	Eee I searched it at the internet	*The Briefing* (of Microteaching with TPACK Implementation)	**I/2/MTE.BR/46**
I		From the internet, and then how did you choose the appropriate material to be taught?		
R	47	How was the way. yeah just adjusting it with my needs. I taught the students who were the same level with me therefore I chose what I understood		
I		Is it?		
R	48	Yes		
I		And then how about from the lecture? The briefings before you begin the cycle 2 and cycle 3?		
R	49	Oh from Ms.?		
I		Em em		
R	50	The briefing…Ms. said that if in cycle 2 we use…use media and then more to what…do not focus only to	*The Briefing* (of Microteaching with	**I/2/MTE.BR/50**

		the media but also to how to deliver material. So, not only to the media…not only in terms of the media	TPACK Implementation)	
I		I see. Okay in preparing the lesson plan, is there any difficulty in choosing teaching media…did you find any difficulty during preparing your teaching while implementing TPACK framework? What are they? Explain!		
R	51	Yes		
I		What is the difficulty?		
R	52	I am confuse, the difficulty yeah yeah in preparing the lesson plan, then choosing the material, what else I think just it	*The Briefing* (of Microteaching with TPACK Implementation)	**I/2/MTE.BR/52**
I		Eee is the material was chose by Ms, or by you?		
R	53	Eee choosing by ourselves		
I		Oh choosing by you?		
R	54	Yes		
I		Okay, and then there was a difficulty, right? How did you overcome those difficulties?		
R	55	To overcome it what yeah…the way to overcome it we just learn what we will deliver so, we want it or not we have to…to learn it so we will not find any mistake or feeling nervous when we delivered the material	*The Briefing* (of Microteaching with TPACK Implementation)	**I/2/MTE.BR/55**

I		Okay, just it?		
R	56	Yes		
I		And how did you teach your students while implementing TPACK framework in the class?/What kind of activities did you use?		
R	57	What yeah method…		
I		May be such as audiolingual or TPR or communicative or cooperative or task base		
R	58	Ooh method what…such as group		
I		Oh yeah meaning that collaborative, right?		
R	59	Yes collaborative	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.TC/59**
I		Group or pairs?		
R	60	In cycle 2 was in pairs and then in the cycle…was in group	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.TC/60**
I		So what activities did you use in cycle 2 and cycle 3?		
R	61	The activities in the cycle 2 yeah that pairs…they did it and later came forward	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.TC/61**

I		What did they do?		
R	62	They did what…in cycle 2 asking about…asking and giving opinion and then in the cycle 3 they were in groups describing something	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.TC/62**
I		How is the example?		
R	63	Yeah described about Borobudur temple, and then panda, and then beach they were in groups describing	*'The Teach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.TC/63**
I		How did TPACK framework facilitate your teaching improvements? Helped in improving the teaching skills		
R	64	Eee how did TPACK helped in facilitating my teaching?		
I		Yes		
R	65	Eee it helped because…when I taught so…I did not need to speak more so by displaying PPT and video yeah…they what they were more what…looked by themselves, later when they did not understand it they could ask me	Technology Knowledge The Perceived Benefits of TPACK Implementation	**I/2/TPACK.TK/65** **1/2/TPACK.BF/65**
I		And then did you think those opportunities (you have mentioned) while implementing TPACK framework have helped achieve your teaching-learning		

		objectives?/ have helped your students to learn better?		
R	66	Eee I think it achieved		
I		Yes, how?		
R	67	Yes it caused it…TPACK helped my teaching. Yeah because TPACK helped in learning objective I could what oh Allah I am confused eem helped to learn better	The Perceived Benefits of TPACK Implementation	**I/2/TPACK.BF/67**
I		How?		
R	68	Because from the use of TPACK eee what…maybe they did not get bored so the learning situation was different…I displayed PPT , video so it helpful	The Perceived Benefits of TPACK Implementation	**I/2/TPACK.BF/68**
I		Okay. How was the teaching evaluation done in your microteaching class with regard to your use of TPACK framework in your teaching practice sessions?		
R	69	From…is this from Ms. or students?		
I		Both		
R	70	If from Ms. what…		
I		The way…how was the way in giving feedbacks?		
R	71	The way in giving feedbacks how….Ms. told		
I		Meaning that after teaching?		
R	72	Yes Ms. delivered the feedbacks after teaching. Should I mention the feedbacks or not?	*The Critique* (of Microteaching with	**I/2/MTE.CR/72**

			TPACK Implementation)	
I		Eee yes e em. Meaning the way is after teaching		
R	73	Yes after teaching I was given continuous feedbacks from my friends after I finished teaching them they were given me feedbacks too	*The Critique* (of Microteaching with TPACK Implementation)	**I/2/MTE.CR/73**
I		I see. Meaning that the feedbacks was just oral or is there any form or not?		
R	74	Only from this		
I		Only oral right?		
R	75	Yes, oral	*The Critique* (of Microteaching with TPACK Implementation)	**I/2/MTE.CR/75**
I		And then may I know What kinds of feedback did you get from your peers or lecturer after implementing TPACK framework in your teaching?		
R	76	If from Ms. maybe this what…I was lacking in delivering material, I still not ready yet	*The Critique* (of Microteaching with TPACK Implementation)	**I/2/MTE.CR/76**
I		Less preparation, is not it?		
R	77	Yes less preparation. And then if from my friends	*The Critique* (of	**I/2/MTE.CR/77**

		sometimes my explanation was not understood yet. If in cycle 3 they were actually, if from the comments, the PPT was good, the color in the cycle 3…and then what else I think just it	Microteaching with TPACK Implementation)
I		Just it?	
R	78	Yes	
I		Did you remember from Ms. in cycle 3?	
R	79	Eee I did not remember…forgot	
I		Did not remember	
R	80	I think there was in the video	
I		Oh in that video	
R	81	Yes, I think	
I		Okay, you have already got feedbacks in cycle 2 and then How did you prepare your second teaching practice as you re-implement the TPACK framework?	
R	82	Eee the preparation yeah I was really looking for the material I like descriptive text therefore, when I was teaching in the class there was no obstacles I think in cycle 3 so I prepared well in terms of PPT and tasks	*'The Reteach'* (of Microteaching with TPACK Implementation) **I/2/MTE.RT/82**
I		How about the tasks?	
R	83	Yeah…they were in group describing	
I		Eee may I know was it different in determining activities in cycle 3 where it different or not in cycle	

		2?
R	84	Determining activity, I think different
I		What is the difference?
R	85	If in cycle was in pairs, but in cycle 3 was in groups
I		I see, meaning that in cycle 2 in pairs while in cycle 3 in groups
R	86	Yes in groups
I		And then eee the last question yeah not yet…before the last question How was your teaching practice of re-implementing the TPACK framework in this stage? Did it reach the criterion or met the evaluator's expectation? How?
R	87	Eee how does it mean?
I		The use of technology, pedagogy, and content
R	88	In cycle 3?
I		Yes
R	89	Eee that by combining it became one eh no I mean…
I		Became one? Meaning that it was collaborative, right?
R	90	Yes aaa I I am confused. What…technology, pedagogy, and content in cycle 3?
I		Yes…you have already received feedbacks in cycle 2 and then in cycle 3 how was the use…what is the name...so that the use of TPACK in cycle 3 could be

		better		
R	91	Oh in terms of technology I prepared an interesting PPT in terms of color and font and after that eee so what is after that?	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.RT/91**
I		Just it?		
R	92	I think just it		
I		Only PPT?		
R	93	Yes, PPT		
I		Is there a picture?		
R	94	Yes there is		
I		How?		
R	95	Oh yeah I displayed the picture on the PPT. The picture for example about descriptive text in cycle 3	The Perceived Benefits of TPACK Implementation	**I/2/TPACK.BF/95**
I		Meaning that you want an interesting media, right?		
R	96	Yes		
I		Did it reach the criterion or met the evaluator's expectation? How?		
R	97	InsyaAllah I think it was reached a criterion	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.RT/97**
I		Because?		

R	98	Because in the cycle 3 I think I was better than in cycle 2	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.RT/98**
I		How did you say it better?		
R	99	It was better in terms of PPT display and then I gave a prepared task for students, more prepared	*'The Reteach'* (of Microteaching with TPACK Implementation)	**I/2/MTE.RT/99**
I		Okay, overall, based on your knowledge and experiences, what would make of an effective TPACK implementation?		
R	100	Yes in terms of technology		
I		How?		
R	101	Because if I did not teach by technology…and using technology is effective so I did not find any difficulty	Technology Knowledge	**I/2/TPACK.TK/101**
I		How was the way….what how was the way in choosing an effective technology?		
R	102	The way I chose technology yeah is adjusting tour needs and then eee what…what yeah…for example this is student's needs we have to choose the technology that suits them. So, eee no what...not too burden	Technology Knowledge	**I/2/TPACK.TK/102**
I		Meaning that it accordance to teacher's needs right?		

R	103	Yes teacher and students
I		Other than that?
R	104	What…I think there is no ee I am confused. Jut it
I		Just it? Sure?
R	105	InsyaAllah
I		Done