Data Analysis Process

In this confirmatory study, the researcher was trying to **assess the impact of Concurrent verbalization.** The researcher administered a structured interview to the author to find out specific information about concurrent verbalization including:

a.) Chapters of focus during concurrent verbalization sessions

b.) Author experiences writing a chapter

c.) Challenges experienced by the author during the writing experience

d.) Author experiences with concurrent verbalization

After conducting and transcribing the interview, the researcher decided to use the predominantly deductive approach to thematic analysis to analyze the data. The deductive approach thematic analysis involves coming up with themes and then going through data find information or codes to fit into the already predetermined themes (Roberts et al., 2019). The pre-existing themes that the researcher expected to find in the data after conducting the interviews and analyzing the transcripts are shown in the table below.

Table 1: Predetermined themes

Predetermined themes & Subthemes
Theme #1 Chapter of focus during concurrent verbalization sessions
Theme #2 Author experiences writing a chapter
Theme #3 Challenges experienced by the author during the writing experience
Theme #4 Author experiences on concurrent verbalization
Theme #5 Suggestions

In following the predominantly deductive approach to thematic analysis the researcher finally performed open coding on the interview transcripts. Codes are short representations that capture the salient features of a main idea expressed by subjects in their responses to questions in a qualitative interview study (Coates et al., 2021). The developed codes were then matched to the sub-themes, with the sub-themes being matched to the main themes as shown in table below.

Table 2: Coding structure

Theme	Subtheme	Code	Interview Excerpt
Author experiences writing a chapter	**NA**	It involved a lot of introspection	*TWD* *"So this interesting I guess cuz I think we're both very um introspective sometimes about what we do as writers so uh I was kind of I thought about the chapter quite a bit beforehand even though as I mentioned during the last concurrent verbalization I didn't have any detailed notes about it".*
Challenges experienced by the author during the writing experience	The Challenges Experienced	Deliberating on the type of plagiarism example to utilize	*TWD* *"So I went back and forth and you'll probably hear this on the recordings but I went back and forth about a number of things um in the chapter one of the things that sticks out was um I wanted to give students insight into some real life consequences of plagiarism and you know cheating behavior and things like that. And so I initially thought I was gonna bring in some stories that've been well publicized in the news."*
	The Solutions to the challenges	Using an anonymized plagiarism example to help students understand the concept and promote integrity	*TWD* *"I got to thinking about it more and I mean obviously I want to promote integrity but I feel like some of those stories in the news those folks have I mean their careers have been completely ruined you know and everything else and so um I guess I didn't want I didn't want to focus after all on that or I chose not to focus after all on those um stories from the news because I also wanted students to see to form a relationship to the scenarios. Like oK fine it's if someone like a senator or s you know a musician or somebody does these kind of things that's that's a little bit removed from their personal situations. So then I went back on myself and changed my mind um*

			and I found something um I think it was it was online and it was from Stanford University and it was like anonymized um instances of like people being caught for plagiarism and what the consequences were and there were just it was just one page long and it's easily accessible it's not a Creative Commons but it's a UR I mean people can get to it from a URL address and it just shows what happened to students in these situations and I thought well that's much more they can relate to that kind of situation. So that was one of the um challenges and which eventually worked itself out"

Findings

Themes

After the data analysis process the researcher paid close attention to semantic and meaningful relationships between the various codes and connected them to the pre-determined themes. The table below shows the number of codes matched to the different pre-determined themes.

Table 3: Themes and the number of codes

Final Themes	No. of Participants	No. of coding references
Theme #1. Chapter of focus during concurrent verbalization sessions	1	4
Theme #2. Author experiences writing a chapter	1	7
Theme #3. Challenges experienced by the author during the writing experience and solutions to the challenges	1	12
Theme #4. Author experiences on concurrent verbalization	1	4
Theme #5. Suggestions	1	4

Theme #1: Chapter of focus during concurrent verbalization sessions

The author focused on the chapter of Choosing Integrity during concurrent verbalization sessions.

TWD

Um 'Choosing Integrity' chapter

On that chapter, the author focused on the ethical use of sources, plagiarism and the consequences of plagiarism.

TWD

I focused on ethical use of sources um and then plagiarism and its consequences as well um so that's what we kind of set out on the scope and sequence. I was thinking about our textbook and our principles for design and our modular approach um and I was thinking about ethical use of sources and um I didn't want to go overboard giving too much information about quoting paraphrasing and summarizing however I thought it needed to be introduced in that chapter so that um I could then go on and talk about um well just talk about what plagiarism is and then talk about how plagiarism happens you know

When writing about the ethical use of sources, the author incorporated the discussion about what quoting, paraphrasing and summarizing are and the differences between the three techniques.

TWD

With the ethical use of sources I kind of incorporated the discussion about what is quoting what is paraphrasing what is summarizing there um and I just talked a little bit about the differences between the three techniques

Theme #2. Author experiences writing a chapter

This theme presented the author's experiences on writing the chapter. The experiences are represented in the mind map below.

Great and interesting experience — It involved alot of introspection — **Author experiences writing a chapter** — It was annoying at some point — It was exciting

The author shared that she had a great and interesting experience writing the chapter

TWD

It was good, I um. So this interesting

The author also said that writing the chapter involved a lot of introspection. She spent a lot of time thinking about how to put the chapter together before she started writing.

TWD

So this interesting I guess cuz I I think we're both very um introspective sometimes about what we do as writers so uh I was kind of I thought about the chapter quite a bit beforehand even though as I mentioned during the last concurrent verbalization I didn't have any detailed notes about it……

I did um spend quite a bit of time thinking about how to put the chapter together before I started writing….

She also spent some time thinking about the outside pieces of material that she might want to bring to the chapter.

TWD

And then also thinking about outside um pieces of material that I want might want to bring in to the chapter….

Um so overall the chapter went well um but I just felt like and I I think I mentioned this the first time and I do this sometimes is I spend a great deal of time before writing kind of thinking about things and then with this chapter in particular I spent a great deal of time looking at things

The author also pointed out that she had an annoying time at some point because of the things that were happening that were interrupting her.

TWD

Yeah I as far as tackling them I mean this session when I was writing that chapter it was quite broken up anyway as I mentioned because of various um other things that happened

But overall, she so was excited about everything in writing the chapter.

TWD

I was so excited about everything and it was like I wanted to get all this stuff in

Theme #3 Challenges experienced by the author during the writing experience and solutions to challenges

This theme highlighted the challenges encountered by the author and some of the ways she used to overcome the challenges. Under the theme there were two sub-themes, sub theme#1 represented the challenges and sub-theme #2 represented the solutions to the challenges as shown in the table below.

Table 4: Theme and sub-themes

Theme and sub-themes	No. of participants	No. of coding references
Theme #3. Challenges experienced by the author during the writing experience and solutions to the	1	12

challenges		
Sub-theme #1. The Challenges Experienced	1	7
Sub-theme #2. The Solutions to the challenges	1	5

Sub-theme #1: The Challenges Experienced

The challenges that the author experienced when writing the chapter are shown in the table below.

Table 5: Sub-theme and the codes

Sub-Theme and codes	No. pf participants	No. of coding references
Sub-theme #1. The Challenges Experienced	**1**	**7**
Before beginning the chapter, she was distracted by a lesson that she had created the previous year	1	3
Being forced to use the infographic on plagiarism spectrum after being denied the license she sought	1	1
Deliberating on the design of the chapter and how to give the definition of integrity	1	1
Deliberating on the type of plagiarism example to utilize	1	1
Spent quite an amount of time looking for an alternative creative commons license	1	1

The author shared that before starting to write the chapter, she got distracted by a lesson that she had created the previous year, and so she based some classroom lessons on it.

> *TWD*
>
> *And so one of the things that I got hung up on at the beginning was um there's a lesson that I designed I don't know it it's a couple years ago and it's been through several permet permutations now but Turnitin came out with this um infographic called 'The Plagiarism Spectrum' and so I based some classroom lessons on it and it's the infographic I really like because it discusses it's a one it's just a simple one page um you know printoff but it discusses um um the different uh different versions of plagiarism and*

kinda gives very brief definitions of what they are and then um the infographic is based on research that Turnitin conducted um where it asked instructors like about frequency and seriousness of these different versions of plagiarism..... I got hung up a little bit at the beginning before I even started writing because um that is not a Creative Commons document.... Um but th yeah so I got really hung up

Another challenge that the author experienced was that she spent some time looking for an alternative creative commons license that would do the same thing with the plagiarism spectrum infographic.

> *TWD*
>
> *And I spent quite a bit of time looking for an alternative that was Creative Cri- Commons license that would do kind of the same thing.*

After failing to get the alternative creative commons license, the author was forced to use the infographic on plagiarism spectrum.

> *TWD*
>
> *I didn't find exactly the same thing I th- I found things that were kind of riffs off of Turnitin that some of em interestingly enough did not credit Turnitin, um but I didn't like them as well for for various reasons um so I ended up retaining that um plagiarism spectrum infographic but having students go and access it you know as an um external source*

Another challenge that the author experienced when writing the chapter is that she had some back and forth about the design of the chapter and how to give the definition of academic integrity.

> TWD
>
> *One other challenge I guess that sticks out in my mind is um I went back and forth quite a few times which you'll hear on the recording as well about the design of it and this I mean it may change again in a different permutation as we put everything into the publishing platform and stuff but um I started off the chapter one of the activities was I wanted to give a definition of what academic integrity is so I went to the International Center for Academic Integrity and I used their definition um and it talks about you know different aspects of integrity um and then I brought in our data that we collected during*

the Digger Integrity Day into that and after I presented that information I gave students two prompts in response to that.

The author also deliberated about the plagiarism example that she wanted to use since she wanted to use it to promote integrity and help students form a relationship with the scenario which was one of the challenges she experienced.

TWD

So I went back and forth and you'll probably hear this on the recordings but I went back and forth about a number of things um in the chapter one of the things that sticks out was um I wanted to give students insight into some real life consequences of plagiarism and you know cheating behavior and things like that. And so I initially thought I was gonna bring in some stories that've been well publicized in the news. Um and then I got to thinking about it more and I mean obviously I want to promote integrity but I feel like some of those stories in the news those folks have I mean their careers have been completely ruined you know and everything else and so um I guess I didn't want I didn't want to focus after all on that or I chose not to focus after all on those um stories from the news because I also wanted students to see to form a relationship to the scenarios

Sub-theme #2: The Solutions to the challenges

This sub-theme outlined the solutions to the challenges the author experienced when writing the chapter. The table below shows some of the solutions the author employed.

Table 6: sub-theme and the codes

Sub-theme and codes	No. of participants	No. of coding references
Sub-theme #2. The Solutions to the challenges	**1**	**5**
Using an anonymized plagiarism example to help students understand the concept and promote integrity	1	1
Using several outside activities to help students get active with the topic of integrity	1	1
Using the structured stationery activity to help students engage with the material	1	1
Working on the chapter incrementally	1	2

The author shared that she found an anonymized resources of instances of people being caught for plagiarism from Stanford University. The resource also had the consequences of plagiarism and it was easily accessible for the students to learn from it.

TWD

So then I went back on myself and changed my mind um and I found something um I think it was it was online and it was from Stanford University and it was like anonymized um instances of like people being caught for plagiarism and what the consequences were and there were just it was just one page long and it's easily accessible it's not a Creative Commons but it's a UR I mean people can get to it from a URL address and it just shows what happened to students in these situations and I thought well that's much more they can relate to that kind of situation. So that was one of the um challenges and which eventually worked itself out.

The author also highlighted that when she had a challenge getting an alternative to the infographic plagiarism spectrum, she was able to find and use some outside activities to help students get active with the topic of integrity.

TWD

But in the meantime then when I was doing that when I was looking for alternatives um I was also thinking about some other things that I wanted to incorporate into the chapter and um I found some things to help do that and one of the things that was a little bit different about that chapter versus the other ones that I've written thus far is um I did ((sigh)) I did use quite a bit of outside things in that chapter versus creating things from scratch because I wanted students there's a lot of like activities to d in that chapter you know like practical thinking about um you know contravening academic integrity guidelines and things like that so I wanted students to get active with the topic of integrity and that's why I included all those activities.

The author also used the structured stationery activity to help students engage with the material when she had some back and forth about the design of the chapter and how to give the definition of academic integrity.

TWD

And I remember when I was doing looking into er not looking into but when I was doing research into textbooks ((clears throat)) when I was working on my PhD one of the um folks who is active in er was active in materials design research um she one of her

articles or chapters mentioned a personal communication from someone and I can't remember who it was but anyway this person mentioned um what he called structured stationery which is like it's so simple um but when you give a student a a chapter uh teaching materials you include just little blank textboxes or something like lines or something to prompt them so they know that they have to do something with it. And so that was mentioned in this chapter of hers that I read as you know um something that could potentially help students to engage with the material and kind of follow. So anyway um the first part of the chapter when I was talking about the Digger Integrity Day and the International Center for Academic Integrity their definition and I put those two prompts to the students I included those little structured stationery boxes and they're just blank boxes so the students can write their responses in. And I thought well it would help them engage with the material but also if this if the teacher wanted to use that chapter in a class and use some of the activities its ready made

When she had interruptions that made her feel annoyed, she decided to work on the chapter incrementally.

TWD

I worked on it kind of incrementally which um is not my preferred way of working but nevertheless I think it helped to um and I did at one point even say you know during this session I was gonna take a break to kind of let things to mull things over in my mind to figure out a way forward. I got stuck on something I can't even remember what it was now but I got stuck on something hard and um I just had to get away from it and I remember ((laughs)) we had talked about this

Theme #4 Author experiences on concurrent verbalization

In this theme, the author shared their experiences with concurrent verbalization.

The author shared that she initially found the concurrent verbalization a bit challenging because she had to read over things so many times and she was getting a little distracted.

TWD

I have to say that when I first started the chapter um the choosing integrity chapter I I found the concurrent verbalization a bit challenging because I read over things so many times um as I'm working and I'm going back all the time and reading through and then it kind of jumpstarts me again you know to move forward. And so I think that I was getting a little bit I don't know I won't say I was getting distracted but I was certainly conscious of the re-reading things like a million times you know on the recording

But as she was getting further into the chapter, the author felt she was getting much better because she had gotten used to concurrent verbalization.

TWD

But then as I got back er as I got further into the chapter I felt like it was going much better I think it was just like a I I needed a getting used to it period if you will with the concurrent verbalization and then it was actually fine um I I didn't I wasn't so conscious of it after that.

The author also pointed out that she had a prolonged writing time on the chapter because of considering too many things on top of concurrent verbalization.

TWD

I mean the that chapter did take me uh um well um a bit of time to get together but I don't know that that was necessarily from the concurrent verbalization um as much as and this is what happens when I do too much work looking at other things ahead of time I was trying to put too much in the chapter and so I was finding that I was doing things and then I was re-thinking them because I was just I was so excited about everything and it was like I wanted to get all this stuff in.

After concurrent verbalization, the author decided to exclude some information from the chapter since it was too much for the students to absorb at once.

TWD

I thought how much can students actually process at one time in one chapter. How much you know um I mean we've got the capacity to break this up so you know so I ended up going back and not including some of the stuff um which I think actually helped the chapter

Theme #5: Suggestions

This theme outlined the suggestions the author had that she thought would be necessary to add to the chapter and the suggestions to the students on how to become better writers in the future. The table below shows the theme and sub-themes.

Theme and sub-themes	No. of participants	No. of coding references
Theme #5. Suggestions	**1**	**4**
Sub-theme #1. Suggestions to add on the chapter	1	2
Subtheme #2. Suggestions to become a better writer in the future	1	2

Sub-theme#1 Suggestions to add on the chapter

The author had two suggestions to add to the chapter as shown in the mind map below.
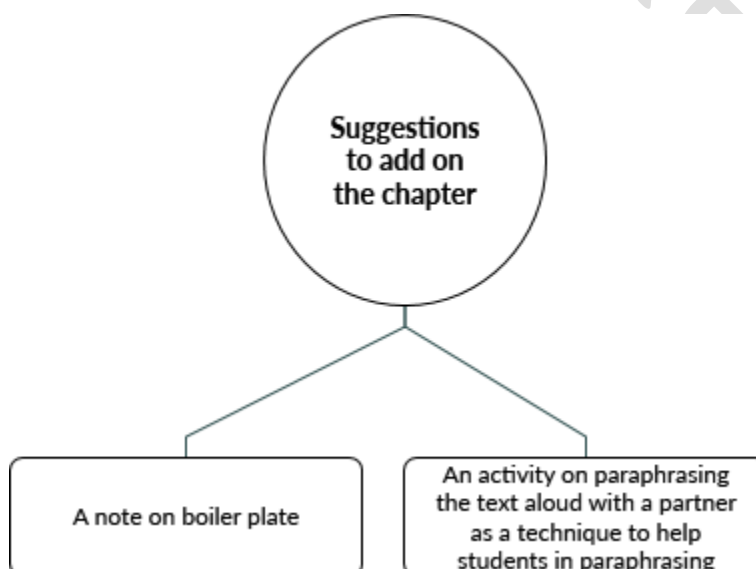
The author said that she would add a note about what boiler plate is since the book was for a co-requisite class.

> *TWD*
>
> *Things that I would go back and do with that chapter potentially um if I revise it again is um put in a note about boilerplate what it is and particularly since this is a book for a co-req class.*

The other thing the author shared was that she would add an activity on paraphrasing the text aloud with a partner as a technique to help students in paraphrasing.

> *TWD*

Um and then I also was thinking about um if it's not in the chapter even putting it in the teachers' book as a potential activity or a technique to use paraphrasing the text a text aloud with a partner um so students can see how that might help them to paraphrase.

Sub-theme# 2: Suggestion to become a better writer in the future

The author had two suggestions on how to become a better writer for students in the writing fundamentals stage. The suggestions are represented in the mind map below.
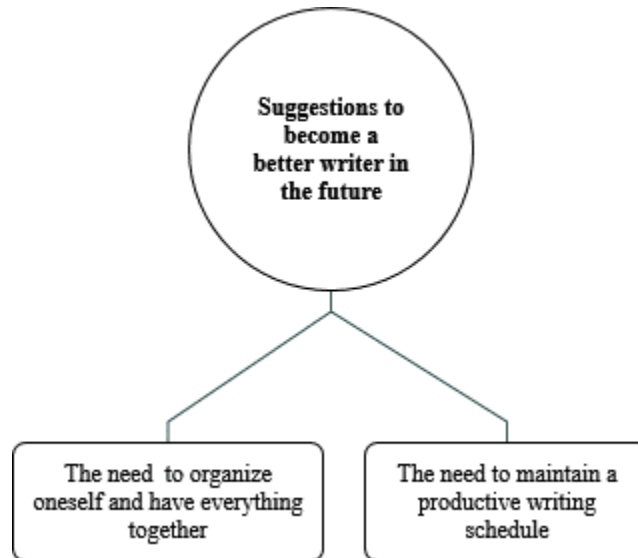
The first suggestion the interviewee provide to the students to become better writers in the future was that students should organize themselves and have everything together.

> *TWD*
>
> *Couple of other ideas for other chapters that might be useful um particularly for the students in the the Writing Fundamentals only. Er the the both segments of the co-req excuse me so things like you know just organizing yourself making sure um you have everything have everything together.*

The other suggestions provided by the interviewee for students to become a better writer in the future was that students need to maintain a productive writing schedule.

> *TWD*
>
> *And then um maintaining a productive writing schedule things like it just kind of came to me as I was doing that chapter so um I'm always making ((laughs)) little notes about things and I guess that's my one of my techniques because I don't do outlining and stuff. But when an idea comes to me I have to write it down or if I see something on the Web I have to print it off because otherwise it just goes. It's not yeah. It's ephemeral.*

References

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