Research Article
Received: 07.11.2022
Accepted: 23.12.2022
Published: 31.12.2022

Citation: Sağlam, Y. (2022). Dialogic or authoritative talk: Which one is more Comprehensible?. *International Journal of Scholars in Education*, *5*(2), 80-89. http://dx.doi.org/10.52134/ueader.1200632

Dialogic or Authoritative Talk: Which one is more Comprehensible?

Yilmaz SAGLAM*

***Abstract*:** The present study sought to explore whether a text supported primarily with dialogic talk is more comprehensible than a text supported with an authoritative one. A phenomenological case study approach was utilized in gathering and analyzing the data. The students' lived experiences with dialogic and authoritative talks were our focus of concern. A total of 14 college students participated in the study. Individual interviews were conducted, recorded, and transcribed. The transcriptions were later analyzed inductively to discover patterns in the data. The results indicated that dialogic talk was found comprehensible by all participating students without any exception. The authoritative talk, on the other hand, was found incomprehensible. According to the students, the dialogic talk is easy to understand because it is written in a step-by-step fashion, comprises daily life words or recognizable with ease, is about a hands-on activity, and is student inclusive. They, further, indicated that the authoritative talk was incomprehensible because it involves technical terms, is superficially written, does not involve experimentation, and does not encourage students to take part.
Keywords: Authoritative talk, comprehensibility, dialogic talk, dialogic teaching.

*Professor, Kilis 7 Aralık University, Kilisli Muallim Rifat Faculty of Education, ORCID:0000-0002-5076-8339, ysaglamdr@gmail.com

Introduction

It is no doubt that today in many parts of the world, monologic teaching is still popular and in use (Molinari & Mameli, 2010). This way of teaching views learning as a transmission of information from teacher to learner and see the learner as a passive recipient. This classical way of teaching, unfortunately, lowers the quality of education. In these classrooms, talking takes place between teacher and students, but it overwhelmingly involves sharing, agreeing, and repeating scientific definitions or facts, excluding those that are not familiar with this technical language. The monologic teaching, because of this, has low quality of the talk. In those classroom environments, only one voice is heard, which is the voice of science. The voices of students (students' personal views) could not be heard. Dialogic teaching, on the other hand, involves multi-voices, encouraging, and welcoming divergent viewpoints. No judgment takes place. This high-quality talk between students and teacher was found to be of crucial educational importance (Mercer et al., 2019).

High-quality dialogue also enhances students' thought processes or mental development. According to Vygotsky (1929, 1930, 1978, 1981), under the guidance of an adult, children learn via imitation. They not only imitate what adult does but also the way they think. To him (1978, 1981), meaning primarily originates from social relations and becomes one's own on the psychological plane via internalization. That is, a child's early talk previously addressing the adult on a social plane later turns inward. This inner talk then mediates the child's thinking (Ibid, 1930). That is, the utterances once arising from adult-child communication begin to re-emerge in the child's inner dialogue, and guide and mediate the child's thinking. Exploring and sharing students' ideas in the classroom, encouraging them to participate in discussions, criticizing, reasoning, and making comments on surfacing ideas, listening to others, demanding alternative solutions, and reaching an agreement are important tenets of classroom dialogue (Dawes et al., 2000). These fundamental actions have a valuable impact on students' thought processes.

In the present study, talk is viewed as a dialogue between teachers and students. A dialogue, in contrast to a monologue, according to Bakhtin (1981), involves multi-voices interacting freely and intentionally. This interaction of voices, to him, creates a dialogue. This perspective, therefore, values the pupil's voice in a particular classroom setting, in which students are expected to articulate their own thoughts rather than replicate words taken from a book. The Education Endowment Foundation (EEF, 2019) recently reported that research results indicated that dialogic teaching led children to advance in language, mathematics, and science. It was further reported that dialogic teaching caused a positive impact on children's confidence and engagement. However, many teachers lack an understanding of the importance of teaching through dialogic talk and the skills required for planning effectual whole class dialogue (Lyle, 2008). Further to that, there are very few studies in the literature about the impact of this type of discourse on students' cognitive development. The present study, thus, aimed to reveal the comprehensibility power of dialogic talk if any.

Theoretical Framework

Dialogic and Authoritative Talk

The idea of dialogic words was first expressed by Mikhail Bakhtin (1981), a Russian linguist and philosopher. To him, unlike others, one can hear many voices in Dostoyevsky's novels. That is, the voices of the characters in Dostoyevsky's novels could be heard independently of the author's voice giving rise to revealing different world views throughout the text. According to Bakhtin, this state of polyphony is distinctive and valuable. To him, in texts,

there are two types of words: authoritative and internally persuasive (dialogic) ones. In authoritative words, there is only one single voice heard, meaning is fixed and not flexible as it comes into contact with other voices. It is further located in a distanced zone, static, and does not allow inter-animation with other voices. However, in an internally persuasive one, at least two voices are heard. It reflects many voices, allows dialogic inter-animation, is not fixed, and is able to reveal new ways to mean.

Inspired by Bakhtin's idea on texts, in 1991, James V. Wertsch documented a relationship between mind, meaning, and dialogue. To him, meaning comes into existence only if two or more voices come into contact. Therefore, meaning-making, according to him, is a dialogic process. He views dialogic talk as speech communication, a chain of utterances addressing one another continuously, filled with dialogic overtones. To Wertsch, understanding, and meaningfulness always involve this addressivity. In this communication pattern, every utterance is a response to a preceding one and has the potential of expecting and confronting counter-words coming from others in contact. Therefore, according to him, dialogicality involves at least two voices freely coming into contact in a sphere of communication and an utterance, a link in the chain of speech communication, is the basic element of concern in the development of meaning or cognitive development of the learner. That is, any true understanding stems from a dialogic inter-animation of voices. An authoritative talk, on the other hand, focuses on recalling scientific facts (Lyle, 2008).

In 1998, this approach to discourse was used by Forman, McCormick, and Donato as a theoretical framework to analyze classroom talk at the middle school level. In the following dialogue, taken from that study, the capital letter *T* stands for teacher, and the letter *S* stands for students. In this dialogue, a group of students is trying to appreciate the perimeter of *Figure 20*, which is not depicted here and has 20 hexagons contiguous to one another. To illustrate, *Figure 3*, depicted below, has 3 hexagons contiguous to one another.

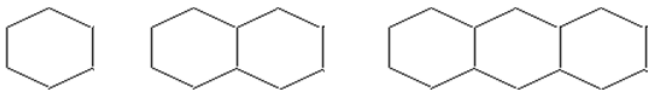

Figure 1 **Figure 2** **Figure 3**

Dialogue 1

35	**T:**	Figure 20, Jimmy.
36	**Jimmy:**	20? Well, see on figure 20 you would count, you see, the sides, each side like for here and here (Points to the end hexagons of Figure 3) it'd be 5. And so you'd take 2 … you would subtract 2 from 20, which would be 18, and you would multiply 18 by 4, because that's all the s-, cause all the sides in the middle have 4 sides and then you would add 10 from the sides.
37	**T:**	OK, so you'd add 10 from the sides. I am sorry Jimmy.
38	**Jimmy:**	And you would multiply the middle by 4.
39	**T:**	And how many in the middle?
40	**Jimmy:**	It would be 18 times 4 and then you'd add 10 and that'd be your answer.
41	**T:**	And add 10. So you could do that for any number I give you.
42	**Jimmy:**	Yeah.

The dialogue above is authoritative because there is only one voice is heard, which is the voice of science. One might oppose this assertion and allege that other than the teacher's voice, Jimmy's voice could be heard, and his ideas could easily be followed in the dialogue. However, a close look indicates that the teacher and Jimmy's utterances are indeed scientific belonging to the language of mathematicians. They seem to share a mutual understanding of a

math solution strategy. When reading it for the first time and being not familiar with this sort of math solution strategy, you might feel alienated. The utterances *you, would subtract 2 from 20, which would be 18, and you would multiply 18 by 4, because that's all the s-, cause all the sides in the middle have 4 sides and then you would add 10 from the sides (Turn 36); OK, so you'd add 10 from the sides (Turn 37); you would multiply the middle by 4 (Turn 38), and It would be 18 times 4 and then you'd add 10 and that'd be your answer (40)* are scientific echoing the words of math. Therefore, in this dialogue, you hear only one voice, the voice of mathematicians. This scientific voice is authoritative, located in a distanced zone, and not disputable, and belongs to no one. That is, the words of math are certain, not questionable or fallible, and belong to the language of mathematics authorities.

Dialogue 2

01	**T:**	Alright hon. (*Previous student sits down*) Let's listen to some other people's ideas so that you'll get it. Eric, what did you discover?
02	**Eric:**	I discovered that it was 6.
03	**T:**	You discovered what was 6?
04	**Eric:**	I mean around the hexagon is 6.
05	**T:**	OK, get up there and tell us that (*Eric goes to overhead projector (OHP)*)
06	**Eric:**	Around the edges, it's 6 (*Points to right most hexagon of figure 3*).
07	**Eric:**	OK, the first one has 6 around it (*Points to figure 1*) and then you take away 1 (*Point to the meeting place in Figure 2 and then to the perimeter of the figure*) because right here it meets. So it'd be 5 plus 5 which is 10. So it adds up to 6 plus 4 is 10 (*Points to figure 2*) so the answer is 4 on each one. You add 4 on each one.
08	**T:**	Alright, just write 10 under that and then show me how when you get to (*Eric writes 10 under figure 2*) OK, so then are you saying for every block that's added it's gonna to go up 4.
09	**Eric:**	Yeah, on here it's 6,6,6, (*Points all three hexagons in Figure 3*) take-away, you take away these ones (*Points to meeting places*) because they meet so it'd be 14. Because here's 5- Wait, no, let's see (*Counts the sides that do not touch another hexagon on the first hexagon of figure three*), it's 5, 5, 5 it'd be 15.
10	**T:**	You have 15. Take a look at your middle one there, honey.
11	**Eric:**	Yeah, OK, I see.
12	**T:**	How many sides in the middle one?
13	**Eric:**	The middle one has 2. So it doesn't have it. So it's 14 because both of the sides meet so it'd be 14.

The dialogue above is on the other hand dialogic. Contrary to the preceding one, there are two voices heard: the teacher's and Eric's voices. Eric's voice involved such utterances as *around the edges (Turn 6); the first one has 6 around it (Turn 7); right here it meets (Turn 7); you take away these ones because they meet (Turn 9) and take look at your middle one there (Turn 10).* As seen in the dialogue, other than the teacher, Eric's own voice could be heard. His utterances are not fully scientific and highly contextualized, which allows one to easily follow and appreciate his ideas. The utterances are freely developed, understandable, open to the participation of others, and disputable. Further to those, the talk involved '*addressivity*'. It involved a chain of utterances addressing one another continuously in the dialogue, in which Eric's responses addressed the teacher, and the teacher's responses in return addressed him, making different voices come into contact.

Research Question

The following question in the present study is the one for which we seek a scientific answer: Is dialogic talk more comprehensible than authoritative talk?

Method

Two types of dialogue were created according to the theoretical framework addressed above. Dialogue I stands for dialogic talk and Dialogue II stands for authoritative talk.

Dialogue I. Dialogic talk

Teacher: (The teacher brings a balloon to the class. He inflates the balloon and dips it into a container of hot water. The students witness the balloon growing in the hot water). Guys, why do you think the balloon gets larger when it is dipped into hot water?
Student 1: Because when it's hot, the balloon gets bigger. The temperature increases.
Teacher: Good. Any other thoughts?
Student 7: The hot water caused the balloon to inflate.
Teacher: Good, how did the hot water cause the balloon to inflate?
Class: (Silence)
Teacher: What kind of heat exchange occurs when we put the balloon in hot water?
Student 8: There is a heat transfer from the hot water to the balloon.
Teacher: What's inside the balloon?
Student 1: There is air, is not there?
Teacher: Well, what is air made of?
Student 4: Various gases.
Teacher: Good, what do you think will happen to the gas particles if the gas in the balloon gets heat?
Student 3: Their temperature rises.
Student 5: They move faster.
Teacher: Good, what happens if they move faster? Imagine them as tiny balls.
Student 2: They try to get out. They press the balloon from the inside and push the inside out. They exert a pushing force.
Teacher: What will happen next?
Student 2: The balloon enlarges.
Teacher: In science, we call this phenomenon expansion of gases.

Dialogue II. Authoritative talk

Teacher: Kids, what do you think EXPANSION means? How can a balloon inflate in hot water be explained?
Student 1: When the balloon heats up, the plastic part softens. As the outside of the balloon softens, it expands.
Teacher: Incorrect, you should think a little more.
Student 2: Heat causes an increase in the kinetic energy of the gas in the balloon. Kinetic energy causes the balloon to inflate.
Teacher: Right, well done… Is there anyone else wants to say this?
Student 7: When the balloon heats up, since the kinetic energy of the gas in the balloon will increase, the pressure inside the balloon increases.
Teacher: Right. The pressure increases. Want to say anything else?
Student 5: Heat causes expansion and an increase in the internal pressure of the gas.
Teacher: Well done, right…

The first dialogue started with a hands-on activity *(immersing the balloon in a cup filled with hot water)* that made the dialogue highly contextualized. In other words, it started with the description of an experiment. This created a context and thus a meaningful ground for teachers and students to talk about. In the dialogue, moreover, the students' responses did not involve solely scientific language. By not judging students' responses as right or wrong, the teacher tolerated and welcomed this language, encouraging students to participate. Thus, throughout the dialogue, one can easily hear the voices of the students such as *The hot water caused the balloon to inflate (Student 7, line 6); There is a heat transfer from the hot water to the balloon*

(Student 8, line 8) and so forth. Furthermore, the dialogue involved addressivity. It involved a chain of student-teacher utterances, a woven, addressing one another continuously in the dialogue. On the other hand, Dialogue II did not involve any experiment. There was no concrete situation to talk about not allowing social interactions between the students and the teacher. By saying, incorrect, you should think a little more (Dialogue II, line 3), the teacher judged the student's response as inappropriate and seemed to demand a scientific explanation, a scientifically acceptable view. The teacher seemed to value scientific language over students' voices. Throughout the dialogue, we hear a solely scientific voice such as *Heat causes an increase in the kinetic energy of the gas in the balloon (Student 2, line 6); When the balloon heats up, since the kinetic energy of the gas in the balloon will increase, the pressure inside the balloon increases (Student 7, line 9-10).* This belonged to the language of scientists. This language was highly appreciated by the teacher, respected by all, and found not disputable. It was in a distanced zone, not reachable by those that are alien to this genre. Also, we did not see a chain of student-teacher utterances. Rather, questions and responses took place with no top-down linkage.

A phenomenological case study approach (Patton, 2002, ss 104-107) is adopted in gathering and analyzing the data. In this approach, the investigator wonders about the participants' lived experiences of a phenomenon. We, therefore, wondered about students' lived experiences with Dialogue I and Dialogue II. In other words, we tried to explore the nature or meaning of students' own experiences. In order to discover their experiences, we conducted in-depth interviews. A total of 14 first- and second-year college students (10 female and 4 male) participated in the study and volunteered for an interview. Since secondary school curricula involve thermal expansion, it is a familiar term for all the participating students. Individual interviews were conducted. The students were asked to read the dialogues and select the more comprehensible one. They were not informed about which dialogue is dialogic or authoritative. Thereafter, they were asked to provide a reason for their choice. Specifically, they were asked. "Why do you think the dialogue, which you have just picked, is more comprehensible?" The interviews were recorded and, later, the interview transcripts were inductively analyzed (Patton, 2002; Saglam & Kanadli, 2021). We looked for meaningful patterns in the data. The following codes and categories were established from the students' statements. Table 1 depicts categories, codes, definitions, and students' excerpts.

Table 1
Operational Definitions for Codes Emerged from the Data

Category I: The properties making ***the dialogic talk (Dialogue I)*** comprehensible according to the students

Code	**Definition**	**Student's excerpt**
1. Daily life	The statements that indicate that the words used are daily life/plain	*The other one (Dialogue I) has more daily life words*
2. Experimental	The statements that indicate that the instruction involves hands-on activities	*It is more understandable because it is done by experiment*
3. Stepwise	The statements that indicate that statements are given in a step-by-step fashion/a detailed way/ are written fluently	*It is given in a step-by-step way as if climbing up a ladder*
4. Welcoming	The statements that indicate that students are encouraged to participate/join in the discussion	*It encourages students to participate*
5. Scientific language	The statements that indicate that the words used are too technical/professional/abstract	*In this dialogue (Dialogue II), scientific expressions are used.*
6. Superficial	The statements that indicate that the	*This is superficially written*

	words used are not given in a detailed/thorough way	
7. Excluding	The statements that indicate that students that possess incorrect ideas are excluded to participate in the discussion or The statements that indicate that students are not given adequate time to brainstorm/think	*It does not encourage students to participate*
8. Abstract	The statements that indicate that there is no concrete situation for students to talk about	*There is no experimentation here*

To find out whether the coding is reliable, the researcher re-coded the data four times at different points in time and the average intracoder reliability of 94 % was calculated. According to Miles & Huberman (1994), this indicates a strong agreement for codes.

The Results

The results indicated that all 14 participating students found the dialogic talk more comprehensible than the authoritative one. The students attributed the comprehensibility of dialogic talk to several attributes, which were coded, and the codes are depicted in Figure 1 below.

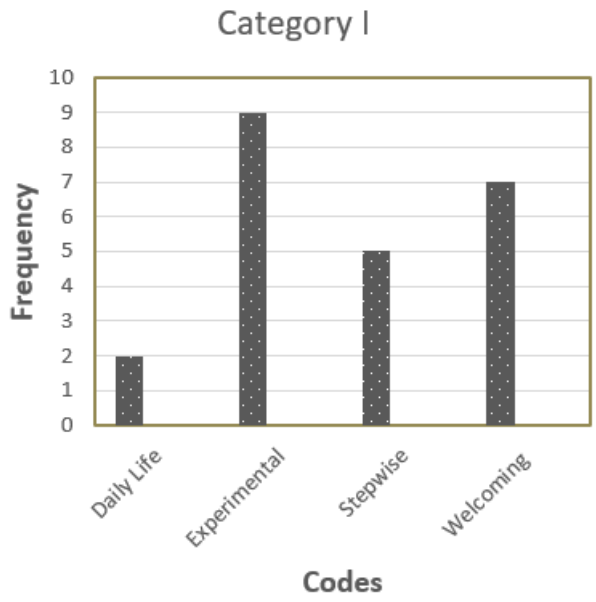

Figure 1**.** The codes making Dialogic talk comprehensible according to the students

The daily life code emerged from the students' statements twice. The students thought that the words used in Dialogue I are from daily life. And this made Dialogue I more comprehensible than Dialogue II. Further, according to the graph, the codes of experimental, stepwise, and welcoming emerged from the students' statements nine, five, and seven times respectively. To the students, Dialogue I is more comprehensible because it includes a hands-on activity, is written in a stepwise fashion, and encourages students to participate in the dialogue.

On the other hand, the students viewed Dialogue II as incomprehensible and provided several reasons, which were coded and depicted in Figure 2.

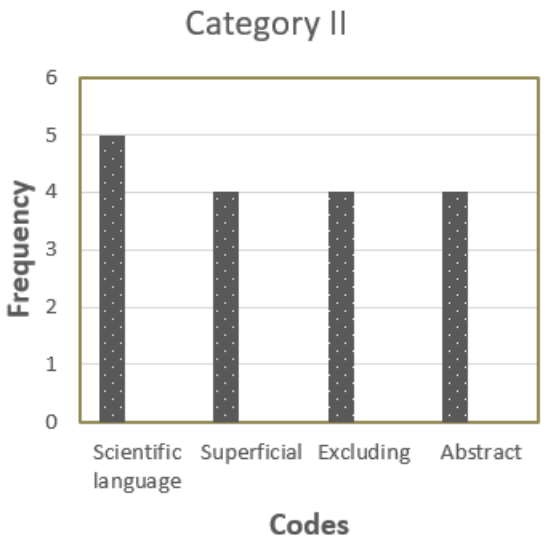

Figure 2. The codes making Authoritative talk incomprehensible according to the students

The code, scientific language, emerged from the students' statements five times. The students thought that the words used in Dialogue II are more technical than the first one. This technical language yet made it incomprehensible. Further, according to the graph, the superficial, excluding, and abstract codes merged from the students' statements four times. To the students, Dialogue II was incomprehensible because it is written in a superficial fashion, it does not encourage students that do not know the answer to participate, and it has not got a concrete experiment leading students to imagine or appreciate what happens.

Discussion and Conclusion

The results indicated that dialogic talk is found more comprehensible compared with the authoritative one by all the participating students without any exception. In other words, the results indicated that a text supported heavily with the dialogic talk was more comprehensible than one supported solely with an authoritative one. According to the students, the dialogic talk is comprehensible because it is written in a step-by-step fashion, comprises daily life words, is about a hands-on activity, and encourages students to take part. They further indicated that the authoritative talk is incomprehensible because it involves technical terms, is superficially written, is not encouraging students to participate, and does not involve a concrete experiment. These findings were surprisingly similar to the theoretical claims. Even though students' explanations involved distinct terms, what they meant was very similar to the theoretical ones. For instance, the students found the authoritative talk too technical to comprehend. This was a theoretical claim made by Mikhail Bakhtin (1981). To Bakhtin, authoritative talk is located in a distanced zone and does not allow inter-animation with other voices. In other words, authoritative talk allows those that are familiar with the scientific language to partake and keep out those that are not familiar with it.

Every scientific discipline possesses its own unique language. Mathematics with its specific terms (i.e. function, range, coordinate system), science with its distinctive concepts (i.e. density, bonding, momentum), and social studies with its exceptional terminology (i.e. ethnography, anthropology, politics) have got their own language. In the areas of all human

activity, language is used in the form of utterances (Bakhtin, 1986), including science disciplines. Language comes alive in the form of utterances. The utterances differentiate in divergent disciplines and create their own speech genre, for instance, many types of business documents, military commands, or verbal signals in the industry (Ibid, 1986). Every science discipline in a similar fashion possesses a unique type of genre. It is quite complex, formed over a long period of time, is culturally shaped, is extremely foreign to novices, and requires time and cognitive involvement for adaptation. However, in a classroom milieu, genre can potentially be foreign to some students and could alienate them from participating in classroom dialogues. We, now, have evidence that technical or scientific genre causes alienation or incomprehension. This alienation may cause some students, especially those who need extra support: (1) to feel that they do not belong to the class, (2) to have an opinion that the classroom conversations are difficult and incomprehensible, and (3) to believe that they cannot succeed no matter what they do. This might eventually turn into an increase in anxiety in the classroom, cause fear of failure, and increase the dropout rate. On the other hand, a comprehensible classroom talk can facilitate those that are unfamiliar with the scientific language to participate in classroom dialogues. This might create a feeling of belongingness and self-efficacy. Further, being physically present in discussions also means being mentally involved in the learning environment, which might cause an improvement in language and cognitive development. This might generate a positive inner cycle. The cognitive improvement, feeling of belongingness, and enjoyment in return might lower anxiety, increase the feeling of self-efficacy, and decrease the dropout rate.

In conclusion, while providing a very limited scale of empirical data, the findings of the current study provided evidence for the comprehensibility of the dialogic talk and incomprehensibility of the authoritative one. The comprehensibility power of dialogic talk offers learning opportunities and calls teachers' attention to its practical importance of it. Also, professional development programs should include dialogic discourse in their program and inform and educate teachers about it.

References

Bakhtin, M. M. (1981). *The dialogic imagination: Four essays by M. M. Bakhtin.* University of Texas Press.

Bakhtin, M. (1986). The problem of speech genres. *In Speech genres and other late essays* (pp. 60-102). University of Texas Press.

Dawes, L., Mercer, N., & Wegerif, R. (2000*). Thinking together: Activities for teachers and children at key stage 2.* Questions Publishing Co.

EEF. (July 2011). *Dialogic teaching, education endowment foundation* (EEF). https://educationendowmentfoundation.org.uk/

Forman, E. A., McCormick, D. E., & Donato, R. (1998). *Learning what counts as a mathematical explanation*, *9*(4), 313-339.

Lyle, S. (2008). Dialogic teaching: discussing theoretical contexts and reviewing evidence from classroom practice. *Language and Education*, *22*(3), 222-240.

Mercer, N., Hennessy, S., & Warwick, P. (2019). Dialogue, thinking together and digital technology in the classroom. Some educational implications of a continuing line of inquiry. *International Journal of Educational Research, 97,* 187-199.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* Sage Publications.

Molinari, L., & Mameli, C. (2010). Classroom dialogic discourse: An observational study. *Procedia Social and Behavioral Sciences, (2),* 3857–3860.

Patton, M. Q. (2002). Variety in qualitative inquiry: Theoretical orientations. In C. DD. Laughton V. Novak, D. E. Axelsen, K. Journey & K. Peterson (Eds.), *Qualitative research & evaluation methods* (pp. 75–138). Sage Publications.

Saglam, Y., & Kanadli, S. (2021). *Nitel veri analizinde kodlama* [*Coding in qualitative data analysis*]. Pegem Akademi

Vygotsky, L. S. (1929). The Problem of the cultural development of the child. *Journal of Genetic Psychology, 36,* 415-434.

Vygotsky, L. S. (1930). *Mind and society.* Harvard University Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.

Vygotsky, L. S. (1981). The genesis of higher mental functions. In J. V. Wertsch (Ed.), *The concept of activity in soviet psychology* (pp. 144-188). M.E. Sharpe.

Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Harvard University Press.