



**COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF SPECIAL NEEDS EDUCATION
GRADUATE PROGRAM**

**Practices, Challenges and Opportunities of Online Learning among Students
with Learning Disability in International Community School, Addis Ababa**

By: Eden Yosef

January, 2024

Addis Ababa, Ethiopia

Practices, Challenges and Opportunities of Online Learning among Students with Learning Disability in International Community School, Addis Ababa

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Advisor: Daniel Desta (PhD)

A Thesis Submitted to Addis Ababa University College of Education and Behavioral Studies in Partial Fulfillment of the Award of Master's Degree in Special needs Education

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DECLARATION

I, Eden Yosef hereby declare that the work entitled “*Practices, Challenges and Opportunities of Online Learning among Students with Learning Disability in International Community School, Addis Ababa*” is the outcome of my own effort. The materials presented in this thesis are true and original. Information used for the research has been acknowledged. The thesis had not been submitted to any university

Eden Yosef

Date

CERTIFICATE

This is to certify that this project work “*Practices, Challenges and Opportunities of Online Learning among Students with Learning Disability in International Community School, Addis Ababa*” has been undertaken by Eden Yosef for the Partial fulfillment of the award of Master’s degree in Special Need Education at Addis Ababa University College of education and Behavioral studies. It is an original research work and not submitted for any University.

Daniel Desta (PhD)

Thesis Advisor

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ABSTRACT

The purpose of this qualitative research was to explore the practices, challenges, and opportunities of online learning among students with learning disabilities at the International Community School in Addis Ababa using phenomenological approach. Data from primary and secondary sources has been collected using In-depth and key informant interview, document analysis, and observation. 'Taguette ', open access tool used to label and categorize meanings, then summarizing, categorizing and structuring meanings. The findings revealed that online learning had positive effects on students with learning disabilities, including stress reduction, confidence boosting, and successful in academic progress. It also improved parent-student relationships, technological skills, and accommodations to enhance learning practices and student performance. However, challenges were found in adapting teaching methods to the online environment, exploring new technological tools, and maintaining student engagement and participation. Opportunities like development of technological skills, improved student-parent relationships, and increased participation among shy students are identified. In conclusion, online learning practices for students with learning disabilities are an important innovation that enhances student performance, reduces stress during school closures, and improves technology proficiency. The study recommended the use of different accommodations and assistive technologies to promote inclusive education online. Further research is needed to explore the involvement of parents in understanding the phenomena and supporting students with learning disabilities.

Keywords: *practice, challenges, opportunities, student with learning disability, online learning, students support team*

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ACRONYMS AND ABRIVIATIONS

ADHD	Attention Deficit /Hyperactive Disorder
APA	American Psychological Asociation
EA	Educational Assistance
EAL	English-as-an-Academic Language
LD	Learning Disability
LS	learning support
IB	International Baccalaureate
ICS	International Community School
ILP	individual learning plans
SLD	students with Learning Disability
SST	Student Support Team/Teacher
STEP	Student transition educational program
US	United states

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Ethiopia ratified the UN Convention on the Rights of Persons with Disabilities in 2006, which recognizes the right of persons with disabilities to inclusive education at all levels of the education system. The recent development in education brought the introduction of online learning including students with different disability.

According to Gilber, (2015), online learning is learning that takes place partially or entirely over the internet. It is a rapidly growing environment that provides students the flexibility to operate outside of the limit of time and place. Online learning can be named as web-based learning, e-learning, Internet-based learning, online learning, distance learning, distance education, distributed learning, computer-mediated or computer-assisted learning. People of all ages now use Internet for informal and formal educational activities.

However, the online education for students with learning disability remained undone. In 1990s, as Marteney and Bernadowski (2016) described programs were developed to meet students' special educational needs and online schools began exploring ways to reach struggling students to provide them with the tools and support they needed to be successful

Marteney and Bernadowski's stated, there are many benefits of online learning for special needs students. In many traditional schools environments, students with disabilities struggle to match the academic performance of their same-age non-disabled peers and typically perform below grade level and make completion of work harder because of emotional disturbance. One of the main features of online programs for students with special educational needs is flexible scheduling. As mentioned, traditional classrooms that require students to be physically present in the classroom for classes, which can take place in a school, college, or university building rarely provide students with special educational needs the extra time that they might need to master course content, sometimes resulting in frustration and disruption in the classroom.

Special needs students who practiced in k-12 online learning experiences with a variety of modifications, accommodations and related services will make the higher education asynchronous

learning networks easier to use. Even though as Burdette, et al, (2013) there are many benefits of online learning for special needs students, the enthusiasm, timeliness, and accuracy of the content can decrease over time. The reason for this is the lack of direct interaction and the variety of learning presented. The students will start to feel bored with the online activities, especially students with intellectual disability who have weak memory and difficulty in abstract thinking need direct guidance. Teachers are expected to be always innovative in presenting varied learning activities. As teachers are the ones who provide the learning and private guidance for students with special needs, the support of parents and classmates is very important. (Balkist, and Agustiani 2020). Collaboration between parents at home is needed to guide their children during the learning process. The basic role of parents or siblings is to prepare learning materials, facilitate communication media, and help with time management.

During COVID -19 pandemic everything has been closed and learning in classrooms was an impossible. Different sectors, offices, schools, and companies tried to reach their target group via virtual platforms. Some international schools like International Community schools strongly worked to provide online learning.

1.2 Statement of the Problem

In Ethiopia, teaching for students with special needs is evolving at a rapid rate due to educational and legal changes in the country. These changes might have its own contribution in giving access to the education for the people with disabilities. Ludago (2020) agrees that currently, special classes and inclusive schools for the children with special needs are increasing in number. Now People of all ages use Internet for informal and formal educational activities.

Online learning is much used in colleges and universities for the last decades, elementary and secondary schools have been slower to move online as (Ludlow, 2014) mentioned. Standen and Brown, (2006) agrees that Special needs were not considered in the early developments in computer-based learning. Related to the pandemic which forced all students in the world to shift to school online, it has been a challenge for many families to figure out their new roles as both parents and teachers.

In Ethiopia, the transition from caregiver to educator has been particularly challenging for parents of students with special needs during the COVID-19 pandemic. As school buildings closed in response to the pandemic, student services like speech pathologists and one-to-one nursing provided by school districts became scarce, making it difficult for parents to provide the necessary support for their children with special needs (Alemayehu, 2020). The use of technology is also another challenge noticed. Every online and online learning it has been required to be part of modern education, and know how students with special needs cope with it. The research conducted by Burdette,et al., (2013), Kearns, (2012), Ludago, T.B. (2020), and Pearson & Koppi, (2002) didn't show the magnitude of online learning, the challenges and its opportunity.

The research identified gaps in practices, challenges, and opportunities that need to be explored for students with learning disabilities (SLDs) who are attending online learning at the International Community School (ICS). ICS has introduced online learning specifically designed for students with learning disabilities, incorporating accommodative and assistive technologies that cater to each learner's unique needs and preferences. It is important to recognize that each student responds differently to online learning based on their Individualized Learning Plan. Despite the advancements in technology, there is a limited amount of research and practices available to further enhance online learning for students with learning disabilities. This research aims to explore the practices, challenges, and opportunities of online learning for students with learning disabilities. The researcher will investigate the practices, challenges, and opportunities of online learning among students with learning disabilities in this study

1.3 Research Questions

1. What are the online practices of learning for students with Learning disability in International community school?
2. What works well for students with learning disabilities while online learning?
3. What does the participation of students with learning disabilities in online learning look like?
4. What are the challenges for students with learning disabilities in online learning in International community school?
5. What are the online learning opportunities for students with a learning disability in International community school?

1.4 Research Objectives

1.4.1 General objective

The major objective of this study was to identify the Practices, challenges and challenges of online learning among students with learning disability in International Community School.

1.4.2 Specific Objective

- To explore the practices, and participation of online learning among students with learning disability in the International community school
- To identify the challenges of online learning for students with learning disability in the International community school
- To identify opportunities of online learning for students with learning disability in the International community school

1.5 Significance of the Study

This study aims to identify the practices, challenges, and opportunities, of online learning among students with learning disabilities at the International Community School in Addis Ababa. The findings of this study will provide important insight into how online learning can be utilized to create an inclusive environment for students with learning disabilities, and how schools can best support them in their educational journey. Furthermore, this research will provide valuable insight into the challenges and barriers that students with learning disabilities face in the online learning environment and will help to inform future policy and practice to create equitable learning experiences for all students.

1.6 Scope of the Study

The design scopes of this study were examined the practices challenges and opportunities of the online learning among students with learning disability and didn't included students with other special needs. The geographic reach of the researcher were delimited to international community school in Addis Ababa. The study was also applied qualitative research design and exploratory type and relevant data were collected through in-depth Interview, key informant interview and observation.

1.7 Definition of key terms

Accommodation is a term used to describe materials or supports provided to assist students with disabilities in their learning.

Assistive technology refers to any technology that assists students with disabilities in their work, making it easier for them to navigate their learning. Computers and software are examples of such technologies.

Online learning refers to the delivery of instruction through electronic means, utilizing various multimedia, internet platforms, and applications.

Phenomenology is an approach used to study the lived experiences of individuals and the phenomena associated with them.

The Student Support Team is a group of educators who come together to help and support students with learning disabilities, utilizing their own areas of expertise.

Technology proficiency refers to the capacity to effectively and professionally utilize technology for communication, information organization, high-quality product creation, and the enhancement of thinking skills.

A student with a learning disability is an individual who experiences a neurological disorder that impacts the brain's capacity to receive, process, store, and respond to information.

1.8 Organization of the Study

This research work has five chapters. The first chapter; deals with introduction, statement of the problem, research questions and research objectives, significance of the study, scope of the study, and definition of key terms. The second chapter addresses the review of related literature of the study. The third chapter deals with the research design and methodology, sources of data, target population and sampling technique, and tools of data collection and analysis. Under chapter four, result and discussions have been presented. And the last chapter (chapter five) contains the summary of the findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Online learning has recently become an increasingly popular educational modality, providing students with learning disabilities (LD) with a unique opportunity to explore the world of knowledge from the comfort of their own homes. While the number of students with LD who are engaging in online learning continues to grow, there are still many practices, challenges and opportunities associated with this modality.

2.1 Concepts Related to Learning Disability and online Learning

2.1.1 Online Learning

Online learning is a remote education that is provided through virtual platforms using devices and internet services. Many online courses as per Parrish et al.,(2020), provide students with the freedom to access course materials, complete assignments, and receive feedback from instructors on their own time, allowing them to create their own schedules and work at their own pace. According to Rosenfeld et al., (2020), this can be especially beneficial for SLDs, who may need more time than their peers to process and understand course materials. Additionally, online learning can provide students with greater access to specialized learning materials and resources that may not be available in a face to face classroom setting.

2.1.2 Learning Disability

A learning disability is a neurological disorder that affects the brain's ability to receive, process, store, and respond to information. The term learning disability describes the seemingly unexplained difficulty a person of at least average intelligence has in acquiring basic academic skills. These skills are essential for success at school and work, and for coping with life in general. "LD" does not stand for a single disorder. It is a term that refers to a group of disorders (Susan, 2006).

Students with learning disabilities (SLDs) take in information, such as sights or sounds, but may have difficulty understanding or attaching meaning to it. They find it hard to organize information so that it is readily accessible. Retrieving the information from either short or long-term memory is difficult. In addition, expressing the information verbally in writing or

nonverbally may be a problem. Generally, they may have difficulty with listening, speaking, reasoning, reading writing, spelling, math, motor skills, and social skills (Cynthia, 2005).

There are various types of learning disability or examples of learning disabilities. “Learning Disabilities” is an “umbrella” term describing many other, more specific learning disabilities such as Dyscalculia, Dysgraphia, Dyslexia, Executive Functioning, Hyperactivity, and Impulsivity. They are briefly discussed with the following sub topic.

2.1.3 Types of Learning Disability

“Learning Disabilities” is an “umbrella” term describing many other, more specific learning disabilities; these are a few common Learning Disabilities,

1. DYSCALCULIA

Dyscalculia or dyscalculia is a learning disability that affects a person’s functioning in mathematics. It can affect abstract reasoning skills in math and or the ability to perform mathematical computations. Dyscalculia can impact estimating a quantity without counting, Calculation skills, Using processes to solve equations, Mental math, Remembering steps in sequence, Reading graphs or charts, Remembering dates and deadlines, Counting the change, and Navigation skills(Cynthia, 2005).

2. DYSGRAPHIA

Dysgraphia is a learning disability that affects a person’s handwriting. People with dysgraphia have difficulty forming letters and spacing letters and words evenly on the page. Their pencil grip is often tight and the experience of writing by hand is uncomfortable (Stevens, 1996).

Dysgraphia can impact the forming of individual letters and putting letters together to create words. When printing, they may have wide and varied spaces between letters and little space between words (Cynthia, 2005).

3. DYSLEXIA

Dyslexia is a neurobiological, developmental, language-based learning disability that affects individuals' ability to learn to read (accuracy and fluency) and the development of spelling skills. Individuals with dyslexia have difficulty connecting spoken language and the printed word

because they have deficits in the phonological component of language. Difficulty decoding words accurately and fluently can affect reading comprehension and vocabulary development. Spelling difficulties may affect the production of written composition (Jane, 2019).

Susan in her book called Teaching Kids with Learning Difficulties in the Regular Classroom, mentions that the new name for dyslexia is Visual Perceptual Disability. Dyslexia or Visual perceptual disability may impact word recognition, decoding, Spelling, and pronunciation of written words, associating letters with the sounds they make, Understanding syllables, Identifying rhymes, and other phonological problems including comprehension (Susan 2006).

4. Executive Functioning

Executive functions involve skills such as organization, planning, time management, task initiation, working memory, and self-regulation. Difficulties in these areas can affect learning and academic performance. Un Inefficiency in the cognitive management systems of the brain affects a variety of neuropsychological processes such as planning, organization, strategizing, paying attention to and remembering details, and managing time and space.

5. Hyperactivity and Impulsivity

Students with hyperactivity may have difficulty controlling their muscles or motor activity and may be constantly on the move. They may flit from task to task without finishing anything or they may persevere on one task with which they have found success ignoring others they are supposed to do. As Susan mentions, impulsive kids appear to live randomly. It is difficult to keep on task and may often act out without thinking first (Susan, 2006).

In her definition of LD Susan mentions Students with ADD/ADHD may exhibit learning difficulties; these specific categories are considered behavioral disorders rather than learning disabilities.

2.1.4 Practice, Challenges and Opportunities of online learning

Online learning practices are becoming one of the supporting of the education system and its challenges and opportunities need to be seen carefully for the effectively teaching learning process in the 21st century. The online learning among SLDs becomes very important for the inclusive education policy. Various educational institutions are practicing the online and

blended learning and teachings for inclusive learning. Practices, challenges and opportunities always exist in the implementation of different technologies and innovations.

In terms of practices, there are several strategies that can be used to facilitate effective online learning for students with LD. For example, instructors can provide additional time for students to complete assignments, as well as access to specialized learning materials and resources (Parrish et al., 2020). Additionally, instructors can provide more frequent feedback and guidance, as well as more opportunities for communication and collaboration (Rosenfeld et al., 2020). These strategies can help to create an environment that is more conducive to learning for SLDs.

Despite the opportunities and practices associated with online learning for SLDs, there are also several challenges that must be addressed. According to Kuhar et al., (2020), SLDs may experience challenges in navigating the technology used in online courses, such as web browsers and online learning platforms. Rosenfeld et al., (2020), also described that SLDs may struggle with online collaboration due to issues such as poor internet connectivity, limited access to technology, or difficulty in understanding the course materials. Finally, SLDs may experience difficulty in self-regulating their learning, as they may not be able to identify when they need additional guidance or assistance.

The primary opportunity associated with online learning for SLDs is the ability to customize the learning experience to meet their individual needs. Students can be provided with the appropriate accommodations, such as additional time for assessments or different methods of instruction. Additionally, online learning can provide a flexible and comfortable learning environment for SLDs, allowing them to take courses at their own pace and from the comfort of their own homes. Moreover, Al-Zu bi, (2018) believes that they can benefit from the use of assistive technologies, such as text-to-speech software and voice recognition software, which can be integrated into the online learning environment.

In order to take full advantage of the opportunities provided by online learning, it is important for practitioners to be aware of best practices for supporting SLDs in this modality. These include providing appropriate accommodations, such as extra time for assessments, additional support and feedback, and the use of assistive technologies. Additionally, it is important to

ensure that the online course content is accessible to all students, including those with LD. Furthermore, instructors should be trained on how to provide effective and supportive instruction to SLDs in the online environment (Gentry & Kikkert, 2018). Despite the many opportunities and practices associated with online learning for SLDs, there are also a number of challenges that must be addressed. These include the need to ensure that online courses are designed to be accessible to all students, including those with LD. Additionally, it is important to provide appropriate accommodations and support services, such as one-on-one tutoring, to ensure that SLD are able to succeed in the online learning environment.

Longitudinal research conducted by Fullarton, S. (2002) on Student engagement with school: individual and school-level influences, focused on extracurricular activities such as Sport, Music, Band or Orchestra, Debating, Drama, Theatre, Dance, Community & Support work. The researcher categorized thematic areas with student level and school level engagement and results are drawn as per the two level engagements. Results obtained from the research showed that it doesn't reflect the learning engagement rather engagement with the school.

2.2 Review of Empirical Evidences

Burdette, et al., (2013), in their k-12 online learning and students with disabilities study stated that students with disabilities received a free, appropriate public education in the least restrictive environment are constrained from the rapid growth of online learning. The research was a mixed type research used to conduct a survey of 61 state and non-state jurisdiction directors of special education. The finding demonstrated that an increase in the number of states providing online instruction; students with many different types of disabilities participate in online learning; and described the directors' reflections on current issues as well as anticipated barriers to students with disabilities participating in online learning. Ambiguity and variability existed across state policies regarding online education as each state may have been in a different stage of adopting this relatively new approach to K-12 education.

The study on Practices, Challenges and Opportunities of Inclusive Education Implementation in Kambata Tambaro Zone, Ethiopia by Ludago, T.B. (2020) used qualitative research method to explore the existing current status of inclusive education practices, challenge and opportunities. The researcher used interview, document analysis and checklists to collect data. His finding

revealed that there are inadequate infrastructures and education facilities, sanitation facilities, lack of ramps, dirty and dusty classrooms and acoustically non-treated classrooms, equipment and services; moreover, negative attitudes of teachers, lack of budget, limited professionals, lack of responsible personnel education offices. Parents started to send their children to school; however, there is lack of skilled professionals who will screen and identify according to interests of learners. The study suggested that high attention is crucial from all government and other stakeholders for the inclusive education.

In Kearns, (2012) research to assess students engaged Online Learning to identify Challenges and effective Practices; he tried to conduct the research in two ways called Special challenges and affordances existence. The Phase one was reviewing syllabi from 24 online courses in order to discover the types of method being used to assess student learning and contribute to the overall course grade. And the Phase two consisted of a focus group and interviews with eight online instructors to discuss challenges and effective practices in online assessment. Accordingly, challenges arose due to the impact of physical distance between the instructor and the students, adaptations resulting from the necessity of using technology for communicating with students, workload and time management issues, and the ongoing need to collect a variety of assessment data and provide feedback.

Pearson & Koppi, (2002) studied Inclusion and online learning opportunities: Designing for accessibility. Their objective was to assess the accessibility of WebCT for people with disabilities - sensory, cognitive and physical. The guidelines provided by the World Wide Web Consortium (W3C) (Web Content Accessibility Guidelines 1.0, <http://www>). The checking mechanisms including the Bobby Web page analysis tool, developed by CAST (<http://lcast.org/bobby/>), and learner centered design methods provided the basis for the evaluation. The approach involved in this research was extensive evaluation of existing courses by the researcher, discussion with and survey of WebCT designers, and the involvement of students with disabilities through interview and focus group discussion. The provision of alternative information; structure, presentation and organization of content and navigational elements; and accessibility with assistive technologies were considered in the research. The results revealed that many barriers to accessibility can be overcome through awareness of design issues, and that there is a need for practical advice for academics.

Burgstahler (2015) conducted a research on the title “Opening Doors or Slamming Them Shut? Online Learning Practices and Students with Disabilities” in order to explore the question, “What online learning practices make social inclusion possible for individuals with disabilities?” the author answered this question with lessons learned from her own teaching experiences as well as those presented in research and practice literature. She also shared overall characteristics of distance learning programs that promote the social inclusion of students with disabilities in their courses.

2.3 Conceptual Model of the study

Following the literature review the researcher developed the following conceptual model that helps to show the road map to conduct and finalize the research and meet its objective.

Figure 1. Conceptual Model of the study

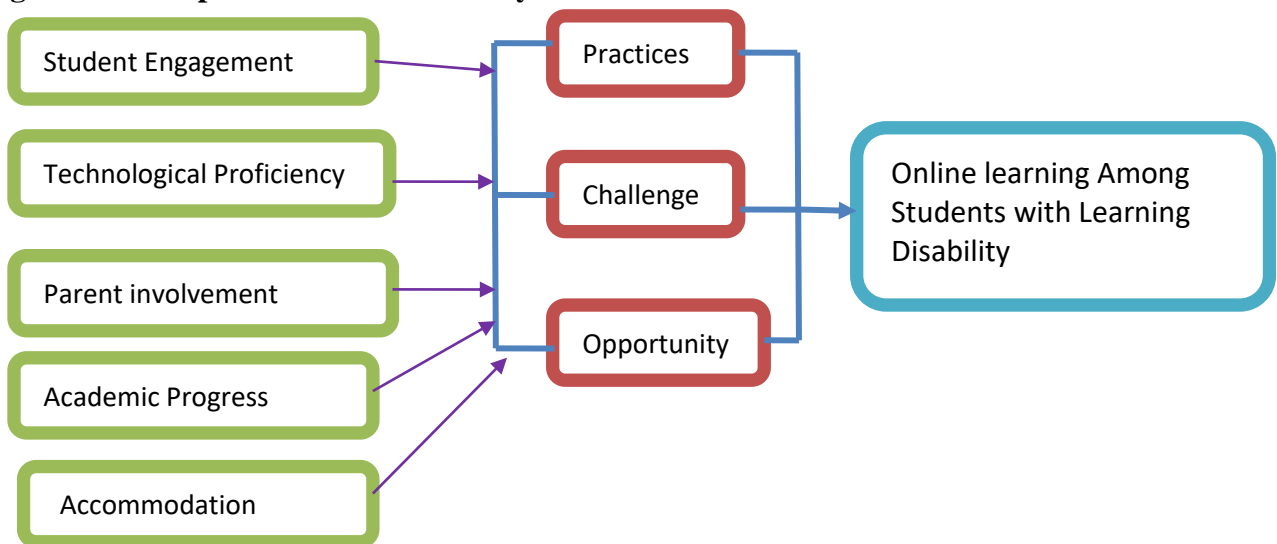


Figure 1 shows the conceptual model of the study that frames the possible path ways that leads to the objective if the research.

- A. **Student Engagement:** is degree of SLDs participation, interest, and passion to attend and complete assignments.
- B. **Technology Proficiency:** it is SLds and SSTs, parents familiarity with learning technology and assistive materials

- C. **Parent involvement:** it is how Parents or care givers involved to assist the online learning among SLDs.
- D. **Academic Progress :** The students educational performance seen in the practice, challenges and opportunity perspectives
- E. **Accommodation:** Accommodations are practices and technologies that facilitate the learning teaching process among SLDs. It including assistive technologies and arrangements that help students to attend online education.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This portion of the research were demonstrates the methodological aspects of the research, which include the research design, research approach, Target population, sampling, data type and sources, data collection instruments used to describe practices, challenges, and opportunities of online learning among students with learning disability/SLD/ and method of analysis and ethical considerations.

3.1 Study design, approach and rational

Creswell (2009) describes research designs as plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. The researcher used qualitative design with Phenomenological approaches. Because the problem under the study didn't have larger data or small in size; it has a room and flexibility to entertain unexpected ideas during research; it gives lived experiences of the study group by gathering in-depth insights and explorations. It also inductively explores data to discover themes or phenomena using open-ended research methods. Creswell, (2009) defines phenomenological approach as a study that attempts to understand people's perceptions, perspectives and understanding of a particular phenomenon. In addition, it is a method that helps to explore the lived experiences of those who have experienced a certain phenomenon. This study explored the lived experience of the students with LD on online learning

3.2 Study area

International Community school /ICS/ in Addis Ababa is the study area selected due to its appropriateness of having the online education for SLDs and representative for international community schools in Addis Ababa. It has been offering a holistic, vigorous, and inclusive program. ICS employs a U.S. college-preparatory curriculum, the International Baccalaureate (IB) Diploma Program for grades 11 and 12, and the Primary Years Program for elementary school. Its programs are internationally accredited and has been providing education for te international community. ICS is selected for the study as it successfully implemented online

learning during the COVID-19 pandemic and other instances where the school had to be closed due to various reasons. The school's ability to adapt and provide effective online education during challenging circumstances made it an ideal choice for research.

3.3 Source of data

The data was collected from both from primary and secondary sources. With respect to primary resources, the researcher interviewed and collected information from SLDs, SSTs and the key informants. Since, the researcher explored the lived experiences those who are involved in the school's online learning program at ICS, purposive sampling technique was instituted to select the 13 study participants, 7 from the students, 3 from SST, and 3 key informants. The study participants revealed their views, lived experiences, practices, challenges, and opportunities, concerning the online learning. Additionally secondary information from written reports, books , articles policies and other relevant documents were used as a source.

3.4 Sampling techniques

Creswell (2015) and Pathak (2017) explained that purposive sampling is the best sampling method for phenomenological study. As this research focused on exploring the lived experiences of students with SLD and SST with regard to Online learning, the researcher used purposive sampling technique to select the eligible population of this study. Using Creswell (2015) recommendations for the phenomenological approach to consist long in-depth interviews involving people who have experienced the phenomenon, researcher selected Students with SLD and SST from the ICS and Key subject matter informants as study samples purposively. The advantage of the sampling method is that the participants have knowledge and lived experience about the topic and they can give reliable information which helped to reach objectives of the study.

There are 117 students enrolled in the student support department in ICS. Of the 117 students 57 students are enrolled in Elementary school, 32 of them are in middle school, and the rest 28 students are in High school. The student support department includes a variety of students and is categorized based on their needs. The elementary school consists of 62 % of the student support department. The 6 students who participated in this study are from Elementary school which has

the majority of the students. These 6 students were purposefully chosen based on the high frequency of the type of learning disability found in the elementary school at ICS.

3.5 Data collection method

The researcher employed in depth interview, key informant interview, document analysis and observation as a data collection tools. They are briefly described in the following way:-

1. In-depth interview

SSTs and SLDs are key samples for the research and in- depth interview with these study participants has been conducted to capture all relevant information from the lived experience of study participants. Such data collection gives opportunity to direct contact between interviewers as Yalew Endaweke (2011) also agrees.

12 participants (6 SLDs, and 3 SSTs) contacted to collect the relevant data which took an average of one hour for each interview. The interviews were conducted in the ICS compound. Prior to the interview, the necessary explanation and schedule were made with each participant and voice record has been done.

2. Key informant interview

Key informant interview with three subject matter experts on Special need education who has been extensive experience and technical skill with regard to disability education and inclusiveness that believed to supplement data collection from SSTs and SLDs was conducted.

The following table shows the key study participants the researcher contacted for data collection.

Table 1. Study participants for the in-depth and key informant interviews

Interviewees	Students with SLD		SST		Key informant		Total
	Male	Female	Male	Female	Male	Female	
In-depth and key informant interview	3	3	1	2	1	2	12
Total							12

3.6 Validity and Reliability

For qualitative research, validity and reliability was done by employing multiple data collection. This research tried to employ in-depth and key informant interview, observation, and document analysis. Furthermore, the key points of the interview as a word document and back to the interviewee for approval so that the researcher didn't misunderstand anything and finally discussed summary of the findings with research participants.

3.7 Data analysis

The analysis began by transcribing the data obtained from in-depth and key informant interviews. The researcher familiarized herself with the transcribed data by reading and re-reading it to gain a compressive understanding of the participant's experiences. Afterward, the research used phenomenological reduction. Phenomenological reduction as per Creswell, (2009) is a way in which the researcher remove all the presuppositions, prejudice, and own experiences to identify pure data which is uncontaminated by inappropriate interferences.

After the reduction, the next step of the analysis was to identify significant statement or excerpts within the data that captured the essence of the participants' experiences. In this step, the researcher identified core aspects of their lived experiences by extracting meaningful units. Once the significant statement and meaningful units were identified, the researcher created descriptive codes to each of them. The researcher also grouped codes into themes, this facilitated to analyze the coded data to identify patterns and similarities. At the end, the researcher developed a descriptive structure by arranging the themes in a logical order to describe the practices, Challenges, and opportunities of the online learning among students with SLD.

Saunders, et al (2009) recommend the data analysis process to be in the form of summarizing (condensation) of meanings; categorization (grouping) of meanings; and Structuring (ordering) of meanings using narrative. Hence, the researcher used Summarization, categorization and ordering. Online free software called 'Taguette' found on <https://app.taguette.org/> is also employed to tag and categorize the different meanings

3.8 Ethical considerations

The overall interaction between the researcher and the participants was clearly explained to ensure the ethics of the research. The researcher requested consent from the participants by explaining the objectives of the study. For SLDs under the age of 18, consent has been taken from the parents/care giver. The researcher clearly explained the procedures, the rights and responsibilities of the participants in the study and confidentiality procedures for the participants. This helped the participants to make an informed decision to participate in this research. Preserving the anonymity of the participants was the other means of ensuring ethics of the research. Pseudo names were used to identify the study participants as part of confidentiality procedure.

Similarly, all the necessary precautions were taken during framing the questionnaire. By ensuring that, the researcher avoided questions that caused psychological harm during exploring the lived experiences of the SLD and SSTs. Most importantly, the researcher respected the values, suggestions, and opinions of the respondents. Interviews were recorded with the consent of the participants to facilitate the transcriptions.

CHAPTER FOUR

RESULT PRESENTATION

This chapter contains the presentation and discussion of results from the data collected in the study on the Practices, challenges, and opportunities of online learning among students with learning disabilities. The data collected through different techniques has been analyzed presented and discussed in this chapter.

4.1 Institutional Profile

The International Community School of Addis Ababa (ICS) founded in 1966 two years after Emperor Haile Selassie I donated 15 acres or 60,702 m² of land to a small school, intentionally with the express purpose of supporting the international and diplomatic community as well as stimulating growth here in Addis Ababa and throughout Ethiopia.

According to ICS, (2022) the school has a mission is to nurture the talents, character, and intellect of all learners, challenging them to be a positive influence and empowering them to excel in their world. ICS is committed to ensuring that all students learn and engage at the highest levels. ICS is governed by a nine-member board of governors: two members are elected for two-year terms by the ICS parent association, six members are appointed by the board, and one member is appointed by the U.S. Ambassador. ICS employs U.S. college-preparatory curriculum, the International Baccalaureate (IB) Diploma Program for grades 11 and 12 and the Primary Years Program for elementary school. ICS is fully accredited by the Middle States Association of Colleges and Schools and the Council of International Schools, and is authorized by the IB Organization to offer the IB Diploma and Primary Years program (PYP) Programs.

There are 04 nurses one special need coordinator, 11 special need teachers, one psychologist and 5 school counselors to facilitate the Special need education. There are about 40 special need students from elementary up to grade 12.

4.2 Student Support Team in ICS

The Student Support team supports the students besides the classroom teachers. The team consists of a Speech-Language therapist, an Occupational therapist, a School Psychologist, Learning Support teachers, EAL (English as a second language) teachers, and STEP (Student transition educational program teacher). Learning Support Teachers always Support students with mild learning needs with individual learning plans (ILP) and accommodations. The usual designated time to support students does not affect the core instruction taking place.

STEP Program Teachers are designed to support students who are significantly behind the grade level of their age group. STEP students require more support, services, accommodations, and modifications than general education students require. According to students' needs, ICS provides programs for all students. The school uses Response to intervention (RTI) to identify struggling students early on and give them the support they need to thrive in school this process or framework gives educators opportunities to meet the needs of ALL students. According to this, there are three groups of students.

Tier 1- All students with general education teachers, these are students who are half grade level behind or less. This is 80 % of students.

Tier 2- Some students in general classrooms are within a half or one and a half levels behind. This is 15 % of students.

Tier 3- Receive Academic Resource, these students are within one and a half or two grade levels behind. This is 5% of students.

STEP- Students with more significant and intensive learning needs are two or more levels behind grade levels.

The STEP program students are categorized into two. STEP 1 will have an EA (Educational Assistance) designated to differentiate and accommodate core curriculum standards. STEP 1, students will have up to one modified core content area. The students can function independently at lunch and after school activities. They will have one block for intervention. In STEP 2, EA (Educational Assistance) is designated for core instructions, which means

literacy and math. The students will be in a modified standard or curriculum in multiple subject areas as needed.

STEP 2: Students are expected to function without support during lunch and transition time and it is part of the intervention to make them to be independent. They will also have one or more learning support blocks for specialized instruction. STEP 1 and STEP 2 students will have Strategic tutoring after school, giving more time to focus on the student's needs.

Accommodations are given for students enrolled for LS (learning support), EAL (English as a second language), STEP 1, and STEP 2. The accommodations include Changing how they are learning with the same learning outcomes, tools, materials, technologies, visual aids, and time. So they can learn the same content as their peers. The accommodations are given during both instruction and assessment time. The grading is the same as other students except for STEP 2 students as they are in a modified curriculum.

Modifications are given for students enrolled for STEP 2 and sometimes STEP 1. The learning outcome is changed as what they learn is also changed. Modification is the same for the instructional time and assessment time. Students with a modification are graded differently than others.

4.3 Online Learning Experience in the International Community School

During the COVID-19 pandemic, many schools, including ICS, shifted to online learning due to the closure of physical campuses. To support this transition, ICS utilized various online platforms and technologies to facilitate teaching, learning, and communication between students, teachers, and families.

The primary platform used by ICS for online learning was the Toddle Portal. This platform served as a central hub where assignments, schedules, and lectures were posted. It allowed students to stay updated and prepared for Zoom meetings and other virtual interactions. For reading activities, ICS relied on applications such as Razkids and Epic. These platforms offer a wide range of books that students can access and read at their appropriate reading levels. Teachers could assign specific books and track students' progress toward their reading goals.

In terms of mathematics, ICS made use of Mobymax and IXL. These applications are popular for math instruction and practice. Teachers had control over the lessons and assignments within these platforms, allowing them to tailor the content to students' needs.

Zoom, a video conferencing platform, played a crucial role in facilitating face-to-face interactions and live lectures between teachers and students. Additionally, for students with learning disabilities, there were more frequent Zoom meetings to provide one-to-one lessons and additional support. By leveraging these online platforms and technologies, ICS aimed to maintain continuity in education and ensure effective communication and engagement among students, teachers, and families during the challenging period of remote learning caused by the COVID-19 pandemic.

From the reviewed literature there are various challenges and opportunities of the inclusive learning and relevant empirical evidences or researches are very limited with regard to the online inclusive learning. Considering this, the researcher decided to explore practice, challenges and opportunities of the online education among SLDs and designed the following theoretical framework.

4.4 Student Support Team Teachers (SST) Experience on Online Learning

According to the interview responses from SST teachers, the following are the general and common experiences they had during the online learning period. Adaptation challenges, many SST teachers initially faced challenges adapting their teaching methods to an online environment. They had to learn new technologies, tools, and platforms to deliver instruction effectively and engage with students remotely. Maintaining student engagement and participation can be more challenging in an online setting. SST teachers had to find creative ways to keep students motivated and interested in their lessons. This often involved incorporating interactive activities, using multimedia resources, and providing regular feedback to students. Online learning heavily relies on technology, and technical problems can arise, such as internet connectivity issues, software glitches, or hardware limitations. SST teachers had to troubleshoot these issues and ensure students had access to the necessary technology for online learning. SST teachers are known for providing individualized support to students with unique learning needs. In an online environment, providing personalized

attention can be more challenging. SST teachers had to find innovative ways to address individual student needs, such as scheduling one-on-one video conferences, using breakout rooms for small group discussions, or providing additional resources and materials.

Effective communication and collaboration are essential for SST teachers working remotely. They had to utilize various communication tools such as video conferencing, chat platforms, and email to stay connected with students, parents, and other educators. Collaboration with other SST team members might have involved virtual meetings, shared documents, and collaborative planning.

SST teachers often play a crucial role in providing social and emotional support to students. In an online setting, it can be challenging to gauge students' emotional well-being and address their social needs. SST teachers had to find ways to build a supportive online community and create opportunities for students to connect.

SST teachers had to design online assessments and develop strategies to provide feedback to students effectively. This might have involved using online assessment tools, providing written or verbal feedback through digital platforms, or scheduling virtual conferences to discuss student progress.

Students with learning disabilities are expected to participate in all general classroom Zoom meetings. They will be included in online lessons and have access to the educational materials provided to the entire class. However, for interventions and personalized support, they will have one-on-one video Zoom calls. During these individual sessions, SST teachers will prioritize the specific needs of the student and provide tailored support. Students with learning disabilities will have additional meetings scheduled with SST teachers, separate from the general classroom meetings and activities.

4.5 Student Diagnosis

According ICS (2022), the school document archives, the school expects students to have a diagnosis before accessing the services provided. When general classroom teachers and SST teachers observe that a student is struggling with core learning skills and not responding to various interventions, they will request assessments from the school psychologists to determine the case. The

school psychologists at ICS will give a standardized assessment. The student's ability will be assessed by a Psycho-educational evaluation. This tool will help to understand the student's cognitive, academic, and socio-emotional functioning. The evaluation will identify specific issues, gaps, and needs of the student. It will also include suggested strategies and recommendations for accommodation and modifications. According to the results, a student Individualized Learning Plan (ILP) will be prepared to help and support the student. There are times when the evaluation only shows learning needs and no diagnosis or labeling will be done. The school psychologist recommends additional diagnoses from other sources depending on the case. For example, if the case is a neurodevelopmental disorder like autism the school will require diagnostic reports.

Table 2. Demographic characteristics of Respondents

No	Code of participants	Pseudo name of the participants	Sex	Age	Grade For students/ Educational Level for SST	Years of staying with ICS	Diagnosis
1	SLD 1	Linda	F	10	4	5	Specific learning disability
2	SLD 2	Dora	F	10	4	3	SLD literacy
3	SLD 3	Barock	M	11	5	6	dyscalcula
4	SLD 4	Charles	M	11	5	5	Specific learning disability
5	SLD 5	Tesfa	M	10	4	4	ADHD
6	SLD 6	Hiwot	F	11	5	3	ADHD
7	SST 1	Megan	F	38	MA on special needs education	5	
8	SST 2	Solomon	M	35	MA on special education	9	
9	SST 3	Mahlet	F	40	MA on special needs education	13	
10	KI 1	Bekele	M	37	MA on special needs education	11	
11	KI 2	Sharon	F	43	MA on special needs education	8	
12	KI 3	Hewan	F	33	MA on Occupational Therapy	7	

Table 2: demographic characteristics of respondents

The demographic characteristics of respondents show that an average age of students with LD is 11 years old learning all students are attending their grade 4 and 5 classes. Their stay with the school ranges from 3 to 6 years. Major disorder SLDs encounter are 02 ADHD, 03 specific learning disorders and 01 SLD literacy. Since, samples are purposively selected the sex category of respondents became 50% percent for each of sex. All key informants and Student support teachers have a master's degree in relevant fields for students with LD. 83% of SSTs and key informants are adults whose age is above 35 years old. The minimum years of working with ICS by SSTs and Key informants are 5 years while the maximum is 13 years. Special need education is the major subject area majority of the SST and key informants graduated in.

4.6 Practices of Online learning by Students with Learning Disability

4.6.1 Student engagement/ participation

During the COVID-19 pandemic, ICS implemented an online learning platform that provided flexibility for students to attend classes at their own pace. While many students were attentive and actively participated in their online classes, some required frequent redirection to stay engaged. Students with specific learning disabilities (SLDs) faced additional challenges, such as finding a quiet space to minimize distractions and managing their time effectively for Zoom meetings. Students encounter difficulties in adjusting to online learning environments, especially during online education periods. The transition from a traditional classroom setting to a virtual one can present unique challenges for different individuals.

By leveraging the knowledge and skills acquired in the physical classroom, students were able to navigate the transition to online learning more smoothly. The familiarity with class schedules provided a sense of structure and routine, which is important for student engagement and learning. Additionally, being accustomed to the teaching style of their teachers facilitated a smoother transition to online instruction. For example morning meeting, all students were expected to join and participate in the Zoom meeting for community-building activities including students with learning disabilities.

Charles said *"It was good to see all of my friends on screen"* I also observed the students' excitement when they saw their classmates and eagerly participated in the community-building questions or games.

According to Megan, adapting what students already know from the traditional classroom setting to the online learning environment was beneficial. This adaptation helped familiarize students with the online learning schedules and teaching styles which eased their participation. SST teachers tried to maintain the attention of the students and help them to engage in the learning process.

Sharon mentioned that the directions given on online learning have to be clear and direct. Students with learning disabilities often struggle with their attention span.

Sharon: "Barok was more attentive during online sessions when the directions for work were clear and straightforward, and when he considered a task to be easy. He was inattentive during group discussions and tasks that he thought were hard or not interesting."

Sharon also understood that Barok avoided actively participating. He preferred having his camera turned off during the Zoom call, but when it was turned on, he often had his hood over his head, and he didn't volunteer to answer questions. He would give short answers when called on.

Preparing one-on-one or small group Zoom calls helped to address the needs of students with learning disabilities and make them engage better. Mahlate (one of the SSTs) explained that she prefers to make her class one-to-one or small group learning to give each student with LD attention to their needs. She also said giving the learning material ahead of time helped the students to know what they will learn in the next class and they can sit with their parents or tutors and study the lesson before coming to class. which is called a flipped classroom. This helped students' participation and engagement better.

According to Harvard University, (2023), a flipped classroom is structured around the idea that lecture or direct instruction is not the best use of class time. Instead, students encounter information before class, freeing class time for activities that involve higher-order thinking.

Mahlate: "After they have time to read before class I will be there to facilitate the learning based on where they are at depending on their understanding. For example the 5th-grade students, I needed to upload the videos and send the assignments ahead of time. And if they have a question they can ask me when we have face-to-face online meetings."

It was observed that the majority of students with learning disabilities (SLDs) were more proficient in verbal communication compared to written communication. They tended to ask questions and actively participate in verbal discussions. Additionally, some students requested repeated explanations or step-by-step instructions to enhance their understanding. According to Mahilet: *“Linda can express herself verbally without an issue; however, she struggles with the written word”*

According to the students online learning is different from the classroom experience. They needed to prepare a learning space in their house to participate in online learning. Linda said *“Learning at home was weird than learning at school”*. She created a learning space in the living room where she has to turn off the TV so that she won't be distracted.

STEP teacher Solomon said. “Providing feedback to students is crucial for their growth, motivation, and active participation in online learning. Feedback serves as a form of encouragement, highlighting students' strengths and areas for improvement. Even though, giving feedback over the camera is not the same as in-person students always want to hear feedback from the teacher. Feedback like voice recording on the Toddle platform after they completed their work, and positive reinforcements, like online card games play greater role.

4.6.2 Technology Proficiency

ICS has made a commitment to blended learning as a key instructional approach to offer engaging learning experiences to its students. To support this approach, the school provides technological devices to all its students. Specifically, students in 1st and 2nd grade receive iPads, which they can use exclusively while at school. These iPads are equipped with various applications and platforms that facilitate blended learning, enabling students to access educational resources and engage with interactive content. For students in 3rd grade and above, ICS provides laptops to enhance their blended learning experience. These laptops offer the necessary tools and resources for students to fully participate in online activities. Blended learning is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods. The most used platform for blended learning is the Toddle platform. *“Students were familiar with the platform while they were learning in the classroom which helped the online learning experience easier,”* said Megan.

According to Hewan, Assistive technology is utilized to support students in demonstrating their learning. Students with specific learning difficulties may encounter challenges when it comes to showcasing their learning. As part of our teaching approach, we regularly ask students to articulate what they have learned and describe their work process. However, for SLDs, this can be difficult unless they are provided with alternative platforms and access to assistive technology. SLDs practiced using online learning technologies such as navigating the learning platform, accessing resources, and using communication tools like video conferencing with parental support. Few students have struggled at the beginning with learning the Jamboard and other learning platforms. Linda said the Toddle platform and Zoom meeting were helpful for her learning, she said she could easily find the assignments and she could follow up.

ICS subscribed and provides different platforms and applications that can be used for educational purposes. Toddle, Razkids, Khan Academy, and Mobymax are a few examples. Free apps like, Math manipulative and Online UNO card games to improve learning.

4.6.3 Parent/Care giver involvement

The Student Support Department maintains a close collaboration with parents to provide assistance and support tailored to each student's individual learning needs and abilities. This collaborative approach remains consistent even during periods of online learning. According to Bekele;- *“Parents' involvement is very important for the success of the student in online learning as the students do their work from home”*

Megan, SST, explains parental involvement like this

“Sorting out the schedule with parents is an important aspect of maintaining effective communication and collaboration. By establishing clear expectations, both parents and students can ensure that materials, such as books and paper, are prepared before each class. Providing parents with an expectation list helps them understand what is required for each lesson and assists them in supporting their child's learning. This list can include specific materials needed, assignments to be completed, and any additional resources or preparations required. Clear and informative reports sent to parents serve as a valuable tool for keeping everyone involved informed about the student's progress. These reports

can outline the topics and skills the student is currently working on, highlight any incomplete assignments, and suggest extra assignments or practice activities”

Mahlate (SST) also added that sharing information with parents regularly helps both teachers and parents to stay on the same page regarding the student's academic journey and identify areas that may require additional support or attention. Regular communication, such as daily emails, plays a vital role in keeping parents informed about their Child's learning experiences. These emails can provide updates on the student activities, upcoming assignments or assessments, and any important reminders. This ongoing communication allows parents to stay actively involved in their child's education and helps address any challenges related to self-management or organization. By implementing these practices, the school can foster a strong partnership between parents and teachers, ensuring that everyone is well-informed and working together to support the student's academic success. Students with learning disabilities also understand how the involvement of their parents is important in their online learning. Dora said *“I asked my family if I was confused with my work”*, Tesfa also said- *“My family will tell me to be organized and my brother will help me with technology when I have a problem”*

4.6.4 Academic progress in student Practices

Concerning student adaptation of the online platforms, ICS has been focusing on the specific standard for the SLD. Students were not expected to do the Can-do activities but focus on the must-do activities. SLDs were provided more time to finish their work as it was accommodation for them. There was also an office hour where a teacher would be online and the students could join Zoom meetings anytime they had a question to a teacher.

According to Solomon, academic progress depends on the student's familiarity with the assessment method. For instance, since students were already familiar with using Moby Max in the classroom before online learning, the results may not have shown a significant difference. In a classroom setting, students are provided with various manipulative to aid them in solving math problems, which can make the process easier. As a result, some students may perform better on in-person assessments. While there are online manipulative available, using them can be more abstract. When it comes to Unit of Inquiry (UOI), the difference between in-class and online assessments may be more pronounced. UOI involves both theoretical and practical aspects, and it

is generally easier to engage with and participate in UOI activities in a classroom environment compared to an online setting.

Megan said that students with LDs tend to perform better in person because they receive higher-quality feedback and more support. However, their outcomes were generally better during online learning. The online learning experience can be beneficial in terms of boosting confidence, allowing students to participate in alternative ways, and ensuring they feel included in the class without being singled out. If we are adequately prepared, there are ways to improve the online learning experience.

Tefsa expressed his progress is due to the online education and he said “ I will be worried about making a mistake but online I can be on a task without being distracted because if I make a mistake I will try to correct myself and I don't have to be shy or anxious about it”

Megan added saying SLDs do better in person because they will get a better quality of feedback and more support. Their outcomes were generally better when they were online.

4.6.5 Accommodation

SST teachers agreed that to succeed in school, SLDs often need a variety of accommodation services that address their specific needs. During observation visits and in-depth interviews, different accommodations including assistive technologies that help students to attend online education have been practiced. These accommodation practices, tools, and techniques were Ascribe, Time, Less work/activities, Tests/quizzes read aloud, frequent breaks, and Individual calls. Assistive technologies such as speech-to-text recognition, Reading A-Z, Mobi Max for math, directions read/simplified, use of manipulatives, access to the resource room, Graphic organizers, and pictures with words and visual aids were used as an accommodation for students.

Bekele said, “Without accommodation, education for SLD will not be possible”. Responses from SST indicated that when students are asked to respond, they can use Voice to type instead of typing it by themselves. Even if typing is also a skill they need to learn to make their learning easy, ICS use different assistive technologies. For students who struggled to read we were using Epic and Razkids. The software has a choice to read aloud so they can listen to an audiobook. Math-Khan Academy reads instructions to the students so they can solve the problem. It gives

them different examples also. The one-to-one lesson was also provided for the students to get more help as an accommodation. We used Zoom, breakout rooms, Toddle, Ixl, Razkids, Quizlet, Moby Max, Google Slides, Google Docs, and Kahoot to make it more engaging and interactive online.

Figure 2. Online Learning Practices of SLD in ICS

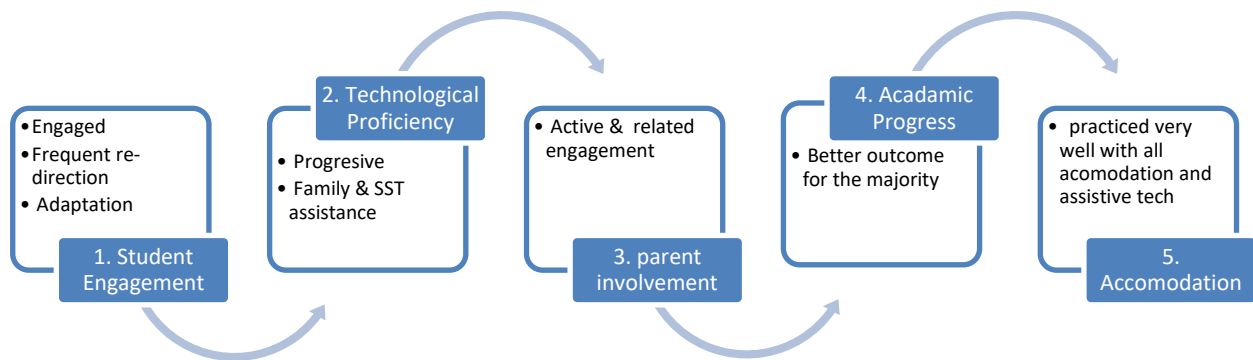


Figure 2 summarizes practices of the online learning in ICS starting from engagement to technology know, then parent involvement, academic progress and accommodation services.

4.7 The challenges of online learning for students with learning disability

Online education has several discontents and the research explored major challenges of online, earning among SLDs. The results are summarized in student engagement, communication, technology proficiency, parent or caregiver involvement, academic progress, and accommodation.

4.7.1 Student engagement/ participation

Maintaining students' engagement and participation can be more challenging in an online setting. SST teachers had to find creative ways to keep students motivated and interested in their lessons. This often involved incorporating interactive activities using multimedia resources and providing regular feedback to students.

As the researcher observed in the class Linda needed frequent redirection to actively participate. Instructions needed to be simplified and repeated for her.

Bekele: *“students with learning disabilities can be easily distracted in online learning which makes participation difficult”*.

It has been also difficult to focus on online courses for the majority of students. For some students learning at home was weirder than learning at school. Most of the time, it has noise or disturbance as there are frequent visits of family members.

Tesfa : *“The classroom is easier, I can just raise my hand and the teacher can help me throw the material if it is math or something but online we don't have that much time the teacher might not see your hand. It's easier to ask questions in person..... We had a small group which was easier”*

According to Solomon:

“The biggest challenge is executive function skills because online learning requires self-organization. Preparing the materials they need for their online learning. SLD most of the time struggles even in the classroom”

Other SST teachers also agree with Mr. Solomon on how executive function skill was a challenge for students with learning disabilities. Most of the learning time was spent trying to login into the platforms or finding the right link to join a meeting and so on.

Megan: *Executive function organization for some students LD was struggling. Keeping things organized or keeping track of their work. Being present at their online sessions on time having the materials ready for class or keeping up with the assignments. Especially if they don't have support at home it will lead to frustration. As we help them in class to organize. In class, they have one-to-one support. There was more frustration online than in-person classes because they didn't have the same support at home”*

Dora: *“I didn't know what to do, I missed a lot of class at the beginning because I might not have known the right time, the WiFi might have gone off, Remembering time, in school teachers will tell you what time and what is next but at home it is hard”*.

To support and help with this problem the SST teachers had a common practice, which was to prepare an everyday to-do list made only for special needs students.

Solomon: *“Making a schedule or a tool to help the students accomplish their work or a checklist for the daily assignments so the student, the parent, and the teacher know the work completed or not”*

4.7.2 Technology Proficiency related Challenges

Online learning heavily relies on technology, and technical problems can arise such as internet connectivity issues software glitches or hardware limitations. SST teachers had to troubleshoot these issues and ensure students had access to the necessary technology for online learning.

Technological challenges faced by students including students with learning disabilities start with how to handle the device. Some students did not charge their laptops or iPads to be ready for the class. Accessing the WiFi or the internet.

At first glance, the technology skills affected the effective implementation of online learning for SLDs. they need guidance for that. At the beginning of the online learning journey, the students didn't know how to behave online. When they see their friends or if they have a question.

Bekele: *“There were students who did not know how to log in to the online platforms and use the functions such as mute and unmute, analysis, etc.”*

Most students were observed using the Zoom meeting features, for example raising hands, and clapping emojis. They were using the comment sections when they were only allowed by a teacher. After clear rules and guidelines were established for online learning and using meeting features and emojis to ensure a productive and respectful virtual classroom environment.

As Megan explained: *The challenge of using assistive technology is that it is new the coming out and things are changing every time, it requires adults working with the children to keep up on the tech, and some technologies require payment which could be another challenge. The other result goes to teachers that the teachers also need to learn how to teach SLD online and use*

different assistive technologies to help the learning process. There are many technologies that we can use to teach SLD online and we are still navigating which one we can use.

Mahlat: Navigating through the technology was the main thing and skills that we called executive function skills were taking time to understand when they were supposed to be online and how to mute and unmute, and all the technical things. Technology by itself is hard to navigate for students.

Students were expected to be online for most of the day. Their classes were online, their assignments were submitted online, and they read online. This affects the student's social communication and the world beside the screen.

Solomon:” Screen time and the visual stimulation of it need to be balanced. Screen time effect can be hard, but it has a bad effect on social skills based on my observation. The kids spend more time on the screen. The Social-emotional component for SLD is important because they want to engage with other students and learn social skills

4.7.3 Challenges of Parent or care Giver involvement

Concerning online learning, parents were challenged to assist their Children with LD with the new technology due to the skill and knowledge they have about it.

Sharon: all parents may not be on board with the established rules and guidelines for online learning. In such cases, open communication becomes crucial to ensure that everyone is on the same page and working together to support the student's participation and engagement in class. To address this, proactive measures were taken to communicate with parents effectively. This includes a combination of emails, phone calls, or other communication channels to reach out and engage in a dialogue about the importance of their involvement in their child's online learning.

Hewan: “Some assignments were difficult for parents or caregivers to involve and assist the child.”

Mahlat: "as I am a parent myself I can understand how parents can be busy with their work. But I will expect them to do their best to be part of their children's learning."

Most interview students shared that if their parents are around they can easily access their work and love to work with their parents. As Charles said *"I can ask my mom if I have a question because it is easier to ask my mom than a teacher"*

4.3.5 Academic Progress

The academic progress of students with learning disabilities challenges starts from using the time effectively. Finishing work on time was a problem for most students with learning disabilities. Students were given more time to meet deadlines as their learning accommodation. This affects their academic progress since it might be hard to catch up. Teachers were focusing on what students can produce by the time they have.

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Mahlet: "The main thing is to focus on the student's goal in their IEP and help and support that with accommodation"

Megan: Budding students with other kids, kids like to learn from each other. Choosing the right buddy can create good motivation if not the SLD will think they can't do what their peers do and won't be motivated.

Megan: the academic progress slightly shows a decline with the online, the group of students whom we were giving online learning showed a decline in their classroom skills, reading, and writing when they went back classroom.....SLD students also decline their reading writing skills, and organization skills. I think using notebooks, reflection notebooks should be incorporated instead of doing everything on the computer"

4.7.4 Challenges related to Accommodation

There are many online accommodations for SLD that are made to support different gaps in student learning. According to Solomon *“The only problem was it will require more time on a screen. When they are in the classroom they can use different math manipulatives that they can touch and feel by their hand which stimulates texture and so on.”*

The students were recommended to use what they have in their house, take a break from their laptops, and engage with the environment they are in.

4.8 Opportunities of online learning for students with learning disability

Online education brought several opportunities and the research explored the major one and the results are summarized in student engagement, technology proficiency, parent or care giver involvement, academic progress, and accommodation.

4.8.1 Student engagement Opportunities

The online platform gave students with learning disabilities different way of engaging in the class room that lead to less stressful and confidence boosting.

Charles: *I wasn't stressed online, I have freedom, I can walk around wherever I want and it helped my education because I was not stressed.*

Mahlet: *“....But the online learning experience can be a good one as far as confidence boosting, that they can participate in other ways, Shy students don't get opportunities in class and when it's online it makes it easier for them to participate than the classroom.*

megan :*If we had an online option for our kids, if we had prepared well, if we had prepared our kids if that's their choice there is a way to be successful as it helps the students to learn in a different way where it can build their confidence. The outcomes could be different.*

Megan also said: SLD are creative thinkers often. They might approach a question or a task differently than other students. Getting their perspective is important to contribute to the learning environment and they can learn from one another. It will boost the student's confidence. Most kids have compensation for their disabilities, and students who have a reading challenge might be very good listeners to the audio books since they or can't read and it will make them richer in

their vocabulary than others. So they can add this value to the class. I call it compensation strategies. Coping with the problem will usually lead to a new skill or compensation knowledge. That can be used in class and contribute to other kids ' learning. Everyone can learn from each other

4.8.2 Technological proficiency Opportunities

Students with learning disabilities have benefited from the opportunities to explore various technologies as part of their learning experience. The use of different platforms and software has provided them with alternative avenues for accessing information, engaging in activities, and receiving support tailored to their specific needs.

Solomon: “The kids had an opportunity to explore different technologies. - They got time to work at their own pace at home.... They were very motivated as they were independent on the technology part.

Dora: I can also comment if I have a question and the teacher or the other kids also can help you.

According to Linda : Zoom meeting was fun, I like to write on the chat section. I was using a laptop and different stationary at home. The teacher sends us work through Google Classroom for homework and assignments. There were also videos sent to us to watch before class.

4.8.3 Parent involvement Opportunities

According to Bekele and Sharon, parents having the opportunity to work with their children at home during online learning provides a unique perspective on their child's abilities and challenges. This firsthand experience allows parents to witness their child's learning process and understand the specific areas where they may require support. Through this collaboration, parents gain a deeper appreciation for the support provided by the Student Support Team (SST) teachers. They recognize the value of the assistance and resources offered to their children. This newfound understanding often leads to increased gratitude and positive feedback from parents, expressing their appreciation for the support their children receive. The open communication between parents and SST teachers further strengthens the partnership. Parents express their gratitude and share their observations, enabling SST teachers to gain valuable insights into the

student's learning experience at home. This collaborative exchange of information helps SST teachers tailor their support strategies and interventions to meet the unique needs of each student.

4.8.4 Academic opportunities

Including students with learning disabilities with the big group of student was an opportunity for the students to learn one from another. They should be given a chance to be treated like other students telling them they can do it and boosting their confidence. Not lowering expectations from SLDs help them to learn to adapt to situations and figure out how to solve problems.

SST teachers becoming an advocate for SLD, by prioritizing their work instead of loads of work. Awakens other teachers to be inclusive with their teaching.

Make an adjustment before giving expectations, if they do not know how to access the material sent, I need to make sure to lead them to it online, what to click, and how to work on it. Then they will know what my expectation is.

Make sure they can respond in many ways, they might need to have read to them, more visual support. Making sure they have their accommodations. Time breaks ... to help support SLD to be successful as any students.

working according to their IEP goals and following their accommodation can help them be successful or will give them opportunities like any other students with them. If they have accommodations like reading to them, ascribe, time accommodations, frequent breaks ... According to Megan, "*Shy students with good ideas can be helped so they can join the big group. Coach them with different strategies to be part of the conversation inside the big group*". It could be giving them a sentence starter. How they can lead the discussion so that they are not outlined and part of the learning. I would also schedule a one-to-one online meeting to work on the IEP and help them connect and stay aware of themselves and make sure they are included.

4.8.5 Accommodation opportunities

According to the in depth interview and observation, in order to facilitate online learning and provide accommodations for students, several resources where used to help students need by SST teachers.

One helpful resource is the creation of a document containing login information and screen-cast passwords. This document allows students to quickly access the necessary information to log in to their online classes. By having this resource readily available, students can easily refer to it whenever they need to access their learning platforms or virtual meetings.

Breakout rooms in Zoom meetings also prove to be valuable for instructional purposes. When there are many students in a Zoom meeting, breakout rooms can be used to create smaller groups. This allows for more detailed explanations and scaffolding of the lesson, enabling students to catch up or learn at their own pace. Once they have received additional support in the breakout rooms, they can rejoin the main Zoom meeting with the rest of the class.

Visual aids, such as visuals, pictures, and videos, can be particularly beneficial, depending on the age group. Students with specific learning difficulties often benefit from visual models. By incorporating visual elements into the lessons, teachers can provide additional support and enhance understanding.

For math instruction, virtual manipulative are valuable tools. These virtual representations of manipulative help visual learners comprehend mathematical concepts. Platforms like Braining Camp offer math virtual manipulative that can be used to engage students and facilitate their learning.

Programs like Tuntastic can be utilized to teach and guide students in story creation and writing. By using this program, teachers can share their screens and lead students through the process of creating stories. This interactive approach makes the learning experience more engaging and easier for students with specific learning difficulties to focus on essential aspects such as characters and settings.

4.9 Discussion

This section tried to compare results with empirical evidences and literatures used in the study. Accordingly Burdette,et al.,(2013), study focused on online learning and students with disabilities: perspectives by focusing on non-state jurisdiction directors. The research followed mixed type research and surveyed 61 directors. It found that students with many different types

of disabilities participate in online learning with their anticipated barriers. The researcher believed that ambiguity and variability existed across state policies regarding online education. Strengthen current application of technology, special education leaders seem to confirm expectations about technology and cost drivers associated with it.

Burdette, et al., (2013), and this research was the focus on online learning with SLDs which their theme is similar. He used mixed type while this use qualitative design, it is a descriptive while the research is phenomenological, while Burdette, et al., (2013), sees barriers to students as a general, this research saw specific challenges with respect to engagement, technology, academic progress parent involvement, and accommodation. When he sees ambiguity and variability existed across state policies and confirm expectations about technology and cost drivers among senior leaderships, this research didn't consider such things.

Different scholars studied on online learning among SLDs, special needs inclusive education which is relevant for this study. Ludago, T.B. (2020) studied Practices, Challenges and Opportunities of Inclusive Education Implementation; Kearns, (2012) on Student Assessment in Online Learning: Challenges and Effective Practices; Pearson & Koppi, (2002) studied Inclusion and online learning opportunities: Designing for accessibility; Burgstahler (2015) conducted a research on the title Opening Doors or Slamming Them Shut? Online Learning Practices and Students with Disabilities.

Objective to explore the existing current status of inclusive education practices, challenge and opportunities, to identify Challenges and Effective Practices, to assess the accessibility of WebCT for people with disabilities - sensory, cognitive and physical, to explore the question, "What online learning practices make social inclusion possible for individuals with disabilities. Their design also is qualitative and explorative research which is almost similar and supportive to this research. Interview, student assessment, focused group discussion and document analysis were the common data collection tools used by majority of the researchers. Their findings tends to are inadequate infrastructures and education facilities, negative attitudes of teachers, lack of budget, limited professionals, challenges arose due to the impact of physical distance between the instructor and the students, adaptations resulting from the necessity of using technology for communicating with students, workload and time management issues, and the ongoing need to collect a variety of assessment data and provide feedback. Phase-Two interviewees offered strategies and suggestions to counteract the challenges; Issues identified for

consideration like the provision of alternative information; structure, presentation and organization of content and navigational elements; and accessibility with assistive technologies. Barriers to accessibility can be overcome through awareness of design issues, and that there is a need for practical advice for academics.

The research has similarity in focus area, qualitative research design, but phenomenological approach different from them; data analysis is quite different that this research used online free access tools to help the analysis. The findings and the results are quite different that results brought in student engagement, technology awareness, parent involvement, academic progress and accommodation related. To conclude the result this research used different conceptual model and brought quite different results that supplement the effort to excel online education for students with learning disability.

The researcher tried to compare single variable such as student engagement with empirical evidences found from the literature. The empirical evidence by Fullarton, S. (2002) on Student engagement with school: individual and school-level influences, was a longitudinal study focused on extracurricular activities such as Sport, Music, Band or Orchestra, Debating, Drama, Theatre, Dance, Community & Support work. Fullarton categorized these extracurricular activities as student level and school level engagement and results obtained with such variables. Such researches are known by their focus on engagement with school than learning engagement which is directly related to student's learning. This research however, looked engagement as a learning engagement which is quite different from Fullarton.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the Major Findings

The primary goal of this study, as stated in chapter one, was to explore the Practices, challenges and opportunities of online learning among students with learning disability in International Community School, Addis Ababa. Qualitative research design with phenomenological approach was employed. Primary data collection from the purposively selected 12 samples from SSTs, SLDs, and key informants was conducted through in-depth and key informant interview as well as observation with checklist. Document review from secondary sources were supplemented the data collection process. Validity and reliability tests and all ethical considerations were taken.

Qualitative data analysis with phenomenological approach applied. Before the data analysis transcription and phenomenological reduction has been done. The transcribed data uploaded to a free open source qualitative data analysis tool called ‘Taguette’ which retrieved from <https://app.taguette.org/>. Then as per the qualitative data analysis summarizing (condensation) of meanings; categorization (grouping) of meanings; and Structuring (ordering) of meanings was done.

The results were categorized in the student engagement, technology proficiency, parent involvement, academic progress and accommodation. The left items are summary, conclusion, recommendations has been presented hereafter.

Since samples are purposively selected their sex category, average years of staying in the school, educational level of SLDs and SSTs was almost similar. All SST participants were masters holder with relevant field. 83% of SSTs and key informants are adults whose age is above 35 years old meaning that more mature. The disorders of the students in the study were ADHD, Specific learning disorder, and SLD literacy.

1. Practices

The online practices of the SLDs in the ICS looks like that students were engaged in the online learning by the support of the school, parents and close follow up and assistances of the SSTs. The online education helped SLDs from getting stressed during COVID-19 pandemic seasons.

Some students were active and others were passive in the learning sessions. For some it gives flexibility and enjoy it for other students they prefer the class room teachings. Technology awareness gradually improved and increased engagements. Parents were tried to assist the technology and assistive devices for their children. The students shifted technology utilization from the gaming to the online learning. Accommodation and assistive technologies also improved students practiced and engagement to the online education. The most used platform to do a blended learning is Toddle platform. Students where familiar with the platform while they were learning in classroom which helped the online learning experience easier. The ICS subscribed and provide different platforms and applications that can be used for educational purposes. Toddle, Razkids, Khan Academy, and Mobymax are few examples. Free apps like, Math manipulative and Online UNO card games to improve learning. The importance of parents involvement in the online learning brought good results on the academic and also engagement of SLDs.

2. Challenges

During the transition to online learning, SST (Students with Specific Learning Disabilities) teachers faced various challenges in adapting their teaching methods. They had to familiarize themselves with new technologies, tools, and platforms to effectively deliver instruction and engage with students remotely. Maintaining student engagement and participation posed difficulties in the online setting, requiring SST teachers to devise creative strategies to keep students motivated and interested. This involved incorporating interactive activities, utilizing multimedia resources, and providing regular feedback. Technical issues also surfaced, such as internet connectivity problems, software glitches, and hardware limitations, which SST teachers had to troubleshoot to ensure students had uninterrupted access to online learning. Additionally, providing individualized support, a hallmark of SST teachers, became more challenging online. To address this, they implemented innovative approaches like scheduling one-on-one video conferences, utilizing breakout rooms for small group discussions, and offering extra resources and materials to cater to individual student needs.

One observed challenge in online learning is that students tend to spend more time in front of screens and may not be as engaged with their physical environment. This prolonged screen time can have an impact on their social skills. In traditional classroom settings, students have

opportunities for face-to-face interactions, group work, and participation in various social activities. These interactions foster social development, communication skills, teamwork, and the ability to navigate social dynamics.

3. Opportunities

The opportunities the online learning brought to SLDs are of many types. The researcher summarized in the following ways:-

Students didn't stressed when they learn online and provided the freedom and helped them to withstand the COVID-19 Pandemic impacts. It also boosted confidences of Shy students to participate as they don't get opportunities in class. SLDs have benefited from the opportunities to explore various technologies. The use of different platforms and software has provided them with alternative avenues for accessing information, engaging in activities, and receiving support tailored to their specific needs. Parents having the opportunity to work with their children at home during online learning provided a unique perspective on their child's abilities and challenges. This firsthand experience allows parents to witness their child's learning process and understand the specific areas where they may require support. The other opportunity including SLDs with big group students was an opportunity student to learn from one another. They should be given a chance to be treated like other students telling them they can do it and boosting their confidence that this online platform provides to be treated with inclusive Education.

5.2 Conclusions

In conclusion, the focus of the research was to explore the practices, challenges and opportunities of the online learning among SLDs. Based on the findings the practices of online learning by SLDs is the important innovation that boosted the student performance, reduced stress during COVID-19 pandemic. SLDs adopted and practiced the online learning replacing their gaming devices for academic purposes. It created strong relationship and understanding among SSTs, parents and SLDs. Student engagement can be said it is A lot of challenges occurred on online education starting from delay and interest loss for online learning, the need for frequent redirection of SLDs, internet loss during online class sessions, technology know how among parents, SLDs, and SSTs. The online education provided opportunity for SLDs to be self-confident, technology proficiency, resisting different stress, and academic improvement. Finally

the research concludes that the online learning significantly practiced, its challenges were responded accordingly and current benefits and future opportunities were observed for the SLDs.

5.3 Recommendations

Regardless of the some discontents online education is very helpful for those who need special assistance or SLD. From the study the following recommendations are drawn:

1. The community at different levels needs to understand the potential of SLDs to engage, practice, challenge and use opportunities of the online learning as their peers with no disability do.
2. Schools are advised to continue the online education by making blended programing that provide both in class and online education inclusively.
3. It is advisable to primarily work to introduce online education before starting as students don't have awareness and motivation specially SLDs.
4. Other schools are recommended to see and learn accommodation and assistive materials ICS used to help LSDs. ICS is also advised to further explore and subscribe to online accommodation tools that help students with learning disabilities that address specific learning disabilities.
5. ICS is recommended to search for a system that simplifies the schedules of general classroom teachers and student support teams to easily access by SLDs.
6. This is a cross sectional research and limited to few numbers of samples and didn't include parents' perspectives due to cost and time constraints. Hence, further longitudinal research that shows the progress of SLDs through time including behavior aspects.

REFERENCE

- Alemayehu, M. (2020). Fight for Education of Students with Special Needs in Ethiopia. DOI: <https://www.voanews.com/africa/fight-education-students-specialneeds-Ethiopia>
- Al-Zu&bi, H. (2018). Online learning challenges and opportunities for students with learning disabilities. *International Journal of Information and Education Technology*
- American Psychological Association (2010). *The Publication manual of the American Psychological Association*. 6th e.d. Washington, DC.
- Brittany Gilbert,(2015). *Online Learning Revealing the Benefits and Challenges*, St. John Fisher College, Fisher Digital Publications.
- Creswell, J. (2009). *Research Design: qualitative, quantitative, mixed methods approach*. 3rd ed., SAGE
- Efaine J. Pearson & Tony Koppi.(2002) Inclusion and online learning Opportunities: Designing for accessibility, *ALT-J*, 10:2, 17-28, DOI: 10.1080/0968776020100203
- Fullarton, S. (2002). Student engagement with school : individual and school-level influences.
- Gentry, J., & Kikkert, P. (2018). Supporting students with learning disabilities in online courses. *International Journal of Disability, Development and Education*
- Gilbert and Brittany. (2015). *Online Learning Revealing the Benefits and Challenges*. St. John Fisher College, Fisher Digital Publications.
- Harvard university (2023). *The Derek book center for teaching and learning*, DOI: <https://bokcenter.harvard.edu/flipped-classrooms>
- Kuhar, S., Jang, S., & Mc Ewen, K. (2020). Examining the challenges and opportunities of online learning for students with learning disabilities. *International Journal of Learning, Teaching and Educational Research*.
- Lambert, L. (2017). *The history and state of online learning*. ResearchGate. Retrieved from https://www.researchgate.net/publication/313752141_The_history_and_state_of_online_learning

- Lorna R. Kearns,(2012). Student Assessment in Online Learning: Challenges and Effective Practices,
- Ludlow, Barbara. (2014) Special Education Ready for Cyber. Teaching Exceptional Children, Vol. 46, No. 5, pp. 68
- Journal of Online Learning and Teaching, University of Pittsburgh, Pittsburgh, PA 15213 USA
- International community school, (2022). Organizational staff capacity building document, unpublished, Addis Ababa.
- Parrish, P., Vitolo, C., & Smith, K. (2020). Online learning for students with learning disabilities: An exploration of opportunities and challenges. International Journal of Special Education,
- Saunders, M., Lewis, P. and Thornhill,A. (2009). Research Methods for Business Students, 5th ed., Pearson Professional Limited, England.
- Paula J. Burdette, Diana L. Greer, and Kari L. Wood.,(2013). K–12 online learning and students with disabilities: perspectives from state special education directors, Journal of Asynchronous Learning Networks, Volume 17: Issue 3, USA.
- P S Balkist, and N Agustiani (2020) Responses of students with special needs to online mathematics learning during the pandemic. Department of Mathematics Education, Universitas Muhammadiyah Sukabumi, Jl. R. Syamsudin, S.H. No.1, Sukabumi 43113, Indonesia
- Robertson, S. (2020). Supporting students with learning disabilities in online learning environments: Challenges and opportunities. International Journal of Information and Education Technology,
- Rosenfeld, R., Cuenca, S., & Saldanha, M. (2020). Opportunities and challenges of online learning among students with learning disabilities. The Journal of Special Education Leadership.
- Sheryl Burgstahler, (2015). Opening Doors or Slamming Them Shut? Online Learning Practices and Students with Disabilities, Accessible Technology Services, University of Washington, Seattle, WA 98195, USA
- Standen PJ and Brown DJ,(2006). Virtual Reality and its role in removing the barriers that turn cognitive impairments into intellectual disability.
- Tesfaye Basha Ludago, (2020). Practices, Challenges and Opportunities of Inclusive Education Implementation in Kambata Tambaro Zone, Ethiopia. Open Access Library Journal, 7: e5989. <https://doi.org/10.4236/oalib.1105989>

Addis Ababa
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**College Of Education and Behavioral Studies Department of Special Needs Education
Graduate Program**

**Practices, Challenges and Opportunities of Online Learning among Students with
Learning Disability in International Community School, Addis Ababa**

Appendix 1. Observation Checklist

By Eden Yosef

Observation Focus	
Name -	Grade -
Diagnoses -	Subject-
1- Engagement: Observe the student's level of engagement during online learning sessions.	
Attentiveness	
Active participation	
Responsiveness to the teacher's instructions and prompts	
2. Communication: Assess the student's communication skills.	
Ability to express themselves verbally or through written communication.	
challenges they may have with articulation	
understanding instructions	
3. Attention span: Observe.	
How long can the student sustain focus and attention during online lessons?	
Any difficulties they may have with staying engaged or getting easily distracted.	
4. Technological proficiency: Assess the student's comfort and ability with using the necessary technology for online learning,	

Such as navigating the learning platform, or	
accessing resources,	
Using communication tools like video conferencing.	
5. Executive functioning skills:	
The student's ability to organize and manage their learning materials	
Observe,	
Follow a schedule, and independently initiate and	
Meet deadlines	
Independently initiate	
6. Accommodation needs	
Identify any specific accommodations or modifications the student requires to access the curriculum effectively	
This could include assistive technology	
visual aids	
Additional time for assignments	
personalized learning materials	
7. Individualized education goals	
Evaluate the student's progress towards their individualized education goals or learning objectives	
Any areas where they may require additional support or modifications to meet their goals.	
8. Emotional well-being as well as any strategies they use to regulate their emotions.	
Pay attention to the student's emotional state during online learning.	
Note any signs of frustration, anxiety or disengagement	

9. Parent or caregiver involvement:	
Observe the level of support and involvement from the student's parents or caregivers during online learning.	
Note any challenges or successes in facilitating the student's participation and progress.	
10. Individualized supports	
Consider the individualized supports outlined in the student's Individualized Education Program (IEP) or any other personalized plans.	
Observe how these supports are implemented and whether they are effectively meeting the student's needs in the online learning environment.	
11. Progress and growth	
Track the student's progress and growth over time.	
Note any improvements or areas of development in their academic skills, social interactions, communication abilities, or any other specific goals outlined in their educational plan.	
12. Collaboration with support team:	
Engage in open	
Communication and collaboration with the student's support team, which may include teachers, special educators, therapists, and parents or caregivers.	
Share your observations with them and discuss strategies to address any challenges or capitalize on the student's strengths.	

Appendix 2. Interview guide for students with Learning Disability

	Interviewer : Eden Yosef	Interviewee
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		Students with learning disabilities
Q 1	Practices	
1	How is your online learning experience?	
2	What did you like about online learning?	
3	How did you prepare yourself for online learning at home?	
4	What is the difference between learning at home and a school?	
5	Who was helping at home when you do online learning?	
Q2	Challenges	
1	What challenges have you faced when you take classes online?	
2	Tell me about the assistive technology challenges you have faced.	
3	What is the main challenge of learning at home?	
4	Did you have a problem accessing school materials at home?	
5	Did get enough help when you need from your SST and Parents?	
6	What makes your online learning harder for you?	
Q 3	Opportunities	
1	What do you like about online learning?	

2	What makes your online learning easy for you?	
3	What are the best strategies you used to help your needs?	

Appendix 3. Interview Guiding question for SSTs and key informants

Interviewer: Eden Yosef		Interviewee: SST / Key informants
Date:		Time:
Q.1. What does the participation of students with learning disabilities in online learning look like?		
1.	What dose the practice of online learning look like to see the engagements of SLD ?	
2.	What strategies have you used to improve the participation of students with learning disabilities in online learning?	
3.	Do you think the use of assistive technology can help to improve the participation of students with learning disabilities in online learning?	
4.	How has the online learning environment been adapted for students with learning disabilities?	
5.	What strategies can be used to ensure that students with learning disabilities are included in online learning activities?	
6.	What type of feedback do you provide to students with learning disabilities to encourage their participation in online learning?	
7.	What changes have you noticed in the participation of students with learning disabilities in online learning since it has become available?	
8.	What value do you think students with learning disabilities can bring to an online learning environment?	
9.	What advice would you give to educators about how to better facilitate the participation of students with learning disabilities in online learning?	
Q.2. What are the challenges faced in teaching online for student with learning disabilities?		
1.	What challenges have you experienced with online learning for students with learning disabilities?	
2.	What challenges did you encounter in practices when you implemented online learning to access same opportunities as students without learning disabilities?	
3.	What challenges have you faced when you adapted your teaching style when teaching students with learning disabilities online?	
4.	What are the challenges of assistive technologies to adopt your teaching methods?	
5.	What strategies have you used to help ensure that students with learning disabilities are able to keep up with their peers in an online learning environment?	
6.	What are the challenges you face in the process of teaching online for students with learning disabilities?	
7.	Any challenges to evaluate students online?	
8.	Are there any online tools or resources that you have found particularly useful in helping you to succeed in online learning?	

9	What changes do you think could be made to improve the online learning experience for students with learning disabilities?	
Q3- Opportunities		
1.	What are the opportunities that online learning brought to the SST department ?	
2.	How do you ensure that all students with learning disabilities can access and benefit from online learning?	
3.	What measures do you take to ensure that online learning is accessible and beneficial to students with learning disabilities.	
4.	In what ways does online learning help the academic achievements of students with learning disabilities?	
5.	How do you provide the necessary support to students with learning disabilities to maximize the potential of online learning?	
6.	What strategies are available to you use to ensure that students with learning disabilities are able to use online learning to their advantage?	
7.	How have you seen the results or achievements of students with learning disabilities improve after using online learning?	
8.	What advice would you give to educators looking to incorporate online learning into the curriculum for students with learning disabilities.	
9	What accommodations and support services are available for students with special needs?	
10	How do teachers ensure that all special needs students have equitable access to learning opportunities?	
11	What strategies do you use to ensure that special needs students are included in classroom activities?	
12	What platforms are available to work with parents of special needs students to ensure their children are receiving the necessary support?	
13	What resources are available to help students with special needs reach their highest potential?	
14	How do you ensure that the learning environment is inclusive for all students, regardless of ability?	
Q 4 Recommendation		
1	What practices do you recommend to be improved for a better learning engagement with SLD?	
2	What assistive technologies to you recommend as a helpful tool for a successful online learning experience?	
3	What do you recommend for other teachers who are new for online learning ?	
4	What preparation has to be taken before online learning begins as SST teacher ?	
5	What strategies do you recommend for managing behavioral problems in online learning while working with SLD?	