



ASSESSING THE PROFESSIONAL DEVELOPMENT COMPONENT OF EARLY LANGUAGE LITERACY AND NUMERACY: A PROGRAM EVALUATION

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Abstract:

This study aimed to evaluate the implementation of the ELLN program focusing on the third phase which was the Learning Action Cells (LACs) in one of the central schools in Digos City. The qualitative research design was employed in the study using an in-depth interview guide for monitoring evaluation to 18 teachers in the selected school. Results showed that all Kinder-Grade 3 teachers attended and benefited on the ELLN training program through the LAC session. Further, findings revealed factors that lead to the effective and efficient ELLN implementation such as conducting an observation to all Kinder-Grade 3 teachers, applying approaches and strategies in class, employing explicit teaching, and indulging a program for intermediate teachers in sustaining literacy and numeracy development. It was concluded that early grade teachers strengthened their skills in teaching and assessing through training and mentoring. Finally, it was recommended that professional development component in ELLN will be improved its effective delivery if time consciousness, resource provision, and mechanism for sustainability of the LAC session will be given more attention.

Keywords: literacy, numeracy, learning action cell, continuous professional development

1. Introduction

Teachers' competence is one predictor of learners' outcomes. That is why teachers should possess primary skills in teaching, especially in terms of teaching literacy and numeracy in early childhood education. Teachers are being perceived as the fountain of knowledge and information in building a strong foundation in language and the number of school-aged children. Because of this, training was organized to serve this need. Nilsen and Gustafsson (2016) acknowledged this by emphasizing that the quality of teaching is widely accepted as the most significant in-school determinant of student achievement.

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There is a need to continue to strengthen teachers' knowledge and skills about how students acquire and develop proficiency in literacy and numeracy.

In the context of globalization today, teachers' adaptation of new knowledge in literacy and numeracy helps young learners to be equipped with essential skills on how to face and survive different challenges in life. For instance, the Department of Education and Skills (2010) proposed a National Plan to Improve Literacy and Numeracy in Schools in Ireland. "Better Literacy and Numeracy for Children and Young People" is a program that ensures all teachers give priority to language skills, literacy, and numeracy in the subjects and programs that they teach. It was designed to integrate the teaching of literacy and numeracy across all aspects of the curriculum to improve students' literacy and numeracy development. To achieve their targets, the Department of Education in Ireland planned to enhance teachers' early childhood care and education practitioners' professional practice in the teaching of literacy and numeracy, in setting goals, in assessing and monitoring progress, and in using assessment information to inform the next steps for learners at early childhood, primary and secondary levels.

In the Philippines, one of the Department of Education programs that addresses teachers' competency enhancement is the Early Language Literacy and Numeracy (ELLN) Program. Based on DepEd Order No. 12 series of 2015, the Professional Development Component is one of the components of the said program which aims to develop a cost-effective professional development system through school-based mentoring or learning partnership program for primary school teachers and instructional leaders. Its objectives are to strengthen K-level to Grade 3 teacher's capacity to teach and to assess early reading numeracy skills and to reinforce the skills of school heads as instructional managers and supervisors, which can improve the management and administration of the program. All of these efforts are expected to improve students' performance in language, literacy, and numeracy.

The Schools Division of Digos City in 2016 started to implement the ELLN program's professional development component in the different schools by sending the participants to the region-wide training. They were expected to share what they had learned, as well as mentor their fellow teachers through Learning Action Cells (LACs). Digos City Central Elementary School is one of the schools whose kindergarten to grade 3 teachers were trained. The school LAC sessions served as the avenue for the teachers to develop their abilities and competencies in teaching and assessment.

In this study, the researcher was interested in discovering and understanding the emergence of teachers' professional development and the demand for promoting early language literacy and numeracy skills among learners in school. The findings of the study may be beneficial to the DepEd authorities in planning future training programs as well as to the superintendents, supervisors, and school administrators in identifying the necessary professional activities for teachers that would enhance their teaching and assessing skills. Further, these would provide useful information to teachers on the importance of adapting strategies in planning instruction and assessment.

2. Statement of the Problem

This study focused mainly on assessing the professional development component of early language literacy and numeracy using Owen's Monitoring and Evaluation framework. Specifically, it answered the following questions:

- 1) Were the teacher-recipients able to participate and benefit from the ELLN training program through the Learning Action Cell?
- 2) Were the objectives of the professional development component attained by the program?
- 3) Were the targets achieved in terms of:
 - a. cost; and
 - b. implementation?
- 4) How can the professional development component of ELLN through the Learning Action Cell be improved to ensure more effective and efficient delivery?

2.1 Conceptual Framework

Figure 1 describes the conceptual framework of the study, which shows the assessment of the professional development component of the Early Language Literacy and Numeracy program. The study used the Input-Process-Output (I-P-O) Model in monitoring and evaluation wherein the input is consisting of the ELLN Professional Development Components such as teachers as recipients, objectives of the program, and expected targets, which can be realized through the costs and implementation. On the other hand, the process involved in-depth interviews, thematic analysis, and data coding. The output is the ELLN Professional Development Component to be implemented through the Learning Action Cell, which is the program's third phase.

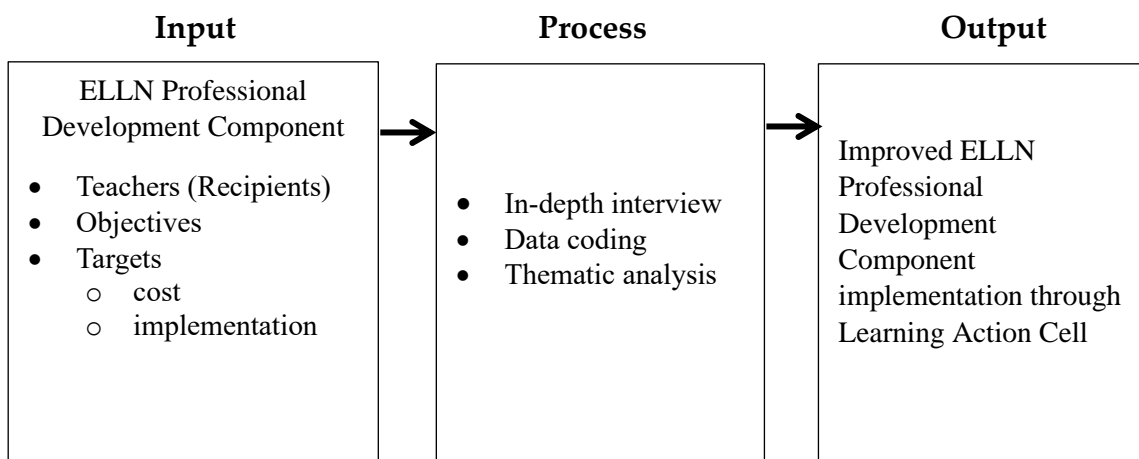


Figure 1: Conceptual Framework of the Study

3. Material and Methods

3.1 Research Design

This study made use of a qualitative research design. Creswell *et al.* (2014) noted that qualitative research is an approach to exploring and understanding the meaning individuals or groups ascribe to a social or human problem. This type of research plays an essential role in solving everyday problems that often have an impact on life, work, health, and overall well-being.

The participants took part in the in-depth interview following Owen's Monitoring questions. John Owen's Monitoring and Evaluation framework was used to specify the research problems and formulate the interview guide questions. To further resolve the query of this study, the interview made use of open-ended questions to solicit productive responses. This method was employed to gather more evidence of program strengths and implementation and the areas that need improvement to be adjusted. This research design is appropriate for this investigation because it sought to find out the respondents' perceptions of the process of its implementation and describe the experiences and outcomes of the program.

3.2 Research Participants

The participants of this study were eighteen (18) elementary school teachers teaching Kindergarten, Grade 1, Grade 2, and Grade 3 classes in one of the schools in the Division of Digos City. The said respondents were chosen since they completely underwent the training program. Utilizing respondents who belong to one school and district is convenient and practical both for the respondents and the researcher. Table 1 presents the distribution of respondents.

Table 1: Distribution of Participants

Respondents	Number of Teachers	%
Kindergarten Teachers	3	16
Grade I Teachers	5	28
Grade II Teachers	5	28
Grade III Teachers	5	28
Total	18	100

The participants were selected using purposive sampling. This means that the selection of items or in making decisions is based on certain criteria laid down by the researcher (Palinkas *et al.*, 2015). This type of sampling was utilized because the researcher knows the population studied, and the researcher considered criteria in choosing the participants of the study based on specific rules and guidelines indicating what samples should be chosen or taken. This type of sampling clearly shows that the sample is a true representative of the population since it satisfies the entire rationale of the study.

3.3 Research Instruments

Primary sources were taken from research-made interview questionnaires. The researcher developed the in-depth interview guide questions, which are open-ended. The interview guide questions were validated by the experts. It was utilized to solicit the reactions, feelings, learning, and experiences of the participants regarding the implementation of the professional development component of the ELLN program guided by the research questions.

Secondary sources such as journals and articles discussion, interpretation, and processing of data taken during the face-to-face interview were gathered. These were employed to support specific arguments and points of view from the primary sources.

3.4 Data Gathering Procedure

The researcher adhered to the ethical considerations of conducting qualitative research and in conducting interviews.

The researcher first sought permission from the school division superintendent and district supervisor. A letter requesting permission to gather data was given to the superintendent and district supervisor in one of the schools in the city. Then, after their approval, a letter requesting permission to conduct the research was given to the principal for the conduct of interviews among selected Kinder-Grade 3 teachers participants.

During the proper collection of data, the participants were verbally asked permission to be interviewed individually. The researcher discussed the nature of the in-depth interview with the teachers. They were briefed on the purpose of the study. Teachers who agreed to be part of the study voluntarily participated in the face-to-face interview.

On the other hand, a recorder was used for the data collection, and the researcher wrote essential responses shared by the respondents. The responses were recorded, transcribed, and analyzed. The researcher made use of data coding and thematic analysis where similarities of responses or themes from the interview were identified.

3.5 Data Analysis

The researcher respectfully presented the responses and accurately interpreted the data. The researcher ensures that teachers' anonymity when presenting their responses is still observed. The data being collected were only used in this study and were not shared with others for confidentiality as agreed. Further, the recorded interview and noted statements were carefully kept, protecting their roles, dignity, and participation in the research.

The collected data were transcribed through transcription, in which the audio material was converted into text and analyzed through coding. Specifically, the responses of the respondents are compressed through descriptive and pattern coding, which seeks to find and summarize the patterns or the central theme of the data. Thematic analysis was also a tool used to analyze the information gathered from the in-depth interview.

4. Results and Discussion

4.1 Teachers' Participation in and Benefits of the ELLN Training Program

The third phase of the ELLN program was through the LAC session, during which the selected teacher-trainers echoed the training program to the teacher-recipients. In Digos City Central Elementary School, two teacher-mentors were trained in the regional conduct of the ELLN program. Table 2 shows the sub-themes extracted from the summary of teachers' responses.

Table 2: Responses of Teachers on the ELLN Training Program

Summary of Teachers' Responses	Theme
<ul style="list-style-type: none"> • Attendance to the LAC session is necessary. • Teachers are required to attend the LAC session. 	Compulsory attendance to LAC session
<ul style="list-style-type: none"> • Scheduled dates for the LAC session were posted ahead of time. • Teachers were informed by the school head, teacher mentors, and grade leaders about the training. • A memorandum was issued by the school head to encourage participation in the training. 	Strict implementation of the program Proper dissemination of the LAC sessions' scheduled dates
<ul style="list-style-type: none"> • The training program was informative and beneficial. • The training helped the teachers to learn more about teaching and assessing early language literacy and numeracy skills. 	ELLN training program for teachers was useful and helpful in executing effective pedagogy.

The trainers of DCCES ensured the complete and full participation of the K-level to Grade 3 teachers through strict checking of attendance. As mentioned by Participant 4, concerned teachers should attend the program *whether they like it not*. Grade leaders are tasked to make sure all of the teachers in their particular grade level are present. Their attendance is checked every LAC session before the program starts and ends. The attendance sheet prepared by the trainers is used for the roll call of all the grade leaders. They are tasked to check teachers' attendance and to list those who are not around in the session.

Moreover, the school principal's initiative and support for the training program encouraged teachers' full participation. The principal strictly imposed the implementation of the program by sending a memorandum and posting the scheduled dates for the LAC session. In the excerpts, most of the teachers affirmed that their principal issued a memorandum to inform them about the training.

Teachers believed that attending this kind of training helped them as early childhood and primary educators to know more about teaching and assessing literacy and numeracy. The said training program gave them several benefits, most notably activities which enhanced their skills in teaching and assessing the language, literacy, and numeracy of the learners in the classroom. Furthermore, participating in this school-based mentoring continues to develop their professional prowess, specifically in pedagogy.

The persistent style of the school administrator and the constant checking of attendance made the participation of all teachers in the LAC session possible. Attendance is compulsory because the training program is only offered to all Kinder-Grade 3 teachers teaching in the public school. As described by Pereira and Gomes (2012), persistent or authoritative leaders are experts in their field of work and can clearly articulate a vision and the path to success. Thus, the school principal of DCCES showed authority in implementing the ELLN training program and allowed the trainers to figure out and plan the scheduling of the LAC session to accomplish its goals for teachers.

Furthermore, the said school-based training provides useful benefits to teachers since they gain new information and updated techniques in teaching and assessing literacy and numeracy skills and their pedagogy. The implementation of the school-based training program allowed teachers to enhance their professional skills. Teachers- recipients are grateful to have participated in a school-based training.

Undeniably, the professional development component of the ELLN supports primary teachers in the Philippines by exposing them to training that upgrades their abilities and elevates their understanding of the theories and strategies in teaching. It ignites the character of the educators when opportunities to enhance their skills, specifically in literacy and numeracy, are provided. Based on DepEd Order No. 42 series 2017, the Philippine Professional Standards for Teachers describes that teachers are expected to engage in activities that increase their levels of knowledge, practice, and professional engagement. The standards allow teachers to grow their understanding and increase sophistication across a broader and more complex range of teaching and learning situations.

Along this line, the ELLN's training program advocates expanding the expertise of each teacher in giving quality education. The participation of teachers in this kind of training aids them in being aware of the latest methods and approaches in teaching, specifically in language, literacy, and numeracy areas. It boosts educators' confidence and reinforces their knowledge. Meanwhile, school heads need to be fully responsive to the needs of their subordinates, such as planning school-based training intended to enrich their capabilities and competencies.

4.2 Attainment of the Objectives of the Professional Development Component

The objectives of the professional development component of the program are to strengthen Kinder to Grade 3 teachers' capacity to teach and assess early reading numeracy skills, to enhance the capabilities of school heads as instructional managers and supervisors, and to improve the management and administration of the program. In this study, 18 teachers were interviewed about their experiences and learning on the said training brought about by the Learning Action Cell.

Teacher-mentors, as well as the guidance of the school principal, followed the training design provided so that every participant followed the same path or direction towards the end of the training program. The LAC session did not start with the actual training, but the trainers oriented first the teachers on the things that they need to perform

accurately and regarding the objectives of the professional development component of the ELLN program and its importance. The orientation of the training program led the participants to the goals of the ELLN, the necessary things to do, and the expected outcomes. The following graph shows the teachers' reactions to the professional development training they participated in through the LAC.

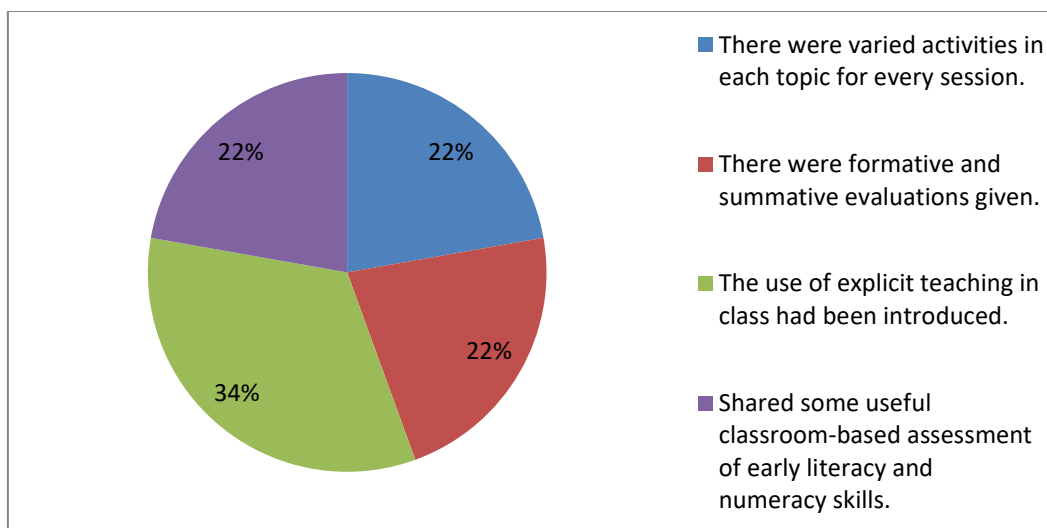


Figure 2: Reactions of Teachers on the Professional Development Training

As illustrated in Figure 2, four sub-themes are exhibited. Teachers said that during their LAC session, they were given several activities to perform. Those activities were in line with that session's topic, which answered the needs of the teachers in teaching through differentiated instruction. Participants found the ELLP training program activities engaging, useful, and entertaining.

Gentry *et al.* (2013) define differentiation as a way of teaching in which teachers proactively modify curriculum, teaching methods, learning activity, and student products to address the needs of individuals and or small groups to maximize the learning opportunity for each student in the classroom. Given this, the training program offered diverse activities to solicit varied ideas from the teachers and new concepts on literacy and numeracy.

The evaluations prepared in the LAC session were diverse as well. It was a group activity, individual task, reflective journal, and a test. Through these formative and summative evaluations provided, teachers could understand and reflect upon the content of the discussion.

According to Rochon (2017), evaluations measure an activity or process's results and progress against set objectives. Power sharing, creative interactive activities, and redistribution of authority foster a better relationship between the evaluation experts and the evaluated team members. In connection, the evaluation tools ensure that an interaction happens during the LAC. It kindled the group participation of teachers, whereby their understanding of specific issues was evaluated.

In addition, LAC sessions brought different and memorable learning experiences that touched the hearts and minds of the early-grade teachers. Among the eighteen teachers interviewed, six of them answered that preparing an explicit teaching lesson plan is the most memorable for them.

Explicit teaching is a method used by the teacher to introduce the lesson by giving examples before going to specific concepts. Kinder-Grade 3 teachers viewed explicit instruction as a useful strategy in teaching. They have gained that pupils need guidance to learn independently with those skills in reading and mathematics. In fact, according to the study of Rupley *et al.* (2009), explicit teaching showed a more considerable improvement in automaticity and problem-solving among students. The teacher gives direct instruction and tells students on how and when to apply new strategies in teaching.

Furthermore, teachers expressed that there were some useful assessments in literacy and numeracy that they had learned from the training program that they could use in their class. Incorporating 21st-century teaching practices should start with updating teachers' arsenal of assessment strategies that they use in the classroom to support their teaching (Greenhill, 2010). Through the ELLN's training program, early-grade teachers acquire some suitable classroom-based assessment tools and strategies to determine learners' literacy and numeracy level. They have learned that assessments should not be homogenous; they should target the objectives and the skills to reach them.

Providing different activities during the training helps teachers acquire more concepts and ideas for teaching and assessing. It does not settle for less mediocrity because teachers expand their knowledge through exposure to activities and evaluations that measure the extent of their learning. In addition, explicit teaching is very favorable in teaching essential skills, mainly in educating learners with literacy and numeracy skills. Teachers need to know what classroom assessments apply to the literacy and numeracy development of the learners.

Their responses show that the ELLN program realized one of the objectives of the professional development component. Their experiences and learning during the LAC were matched and focused on intensifying teachers' ability to teach and assess the literacy and numeracy skills of the children.

4.3 Realization regarding the Learning Action Cell

4.3.1 Cost

The ELLN training program was successfully implemented through the efforts of the trainers, the support and guidance of the school principal, and the active participation of the recipients. Moreover, there were significant resources which fully realized the overall success of the LAC. These are facilities and equipment, financial resources, time, and roles of trainers. All of these contributed to the attainment of professional development training as perceived by the participants. Table 3 shows the resources used in the ELLN Training Program.

Table 3. Resources used in the ELLN Training Program

Sub-themes	Teachers Responses
1. Facilities and Equipment	<p><i>The training program is not very expensive for the trainers to conduct since they only need to have a hard drive or any device to have a copy of the videos of the speakers from the national training. They will prepare a computer/laptop, speakers, activity sheets and paraphernalia to facilitate the training. So, electricity is vital for that training. (Participant 12)</i></p> <p><i>The ELLN training program is very cost-efficient compared to other DepEd training in that they don't need to spend a lot of money on travel expenses because the training uses school facilities like computers and speakers. (Participant 4)</i></p> <p><i>The ELLN training program just uses the recorded videos of the lecturers. These were presented in every session. That's why this program is fastly implemented in our school because of this means. However, some of the teachers fell asleep while listening to the long video. (Participant 5)</i></p>
2. Financial Resource	<p><i>The ELLN training program is cost-efficient in the sense that we teachers did not spend a big amount of money to be trained. It is very advantageous and financially friendly to the teachers. (Participant 7)</i></p> <p><i>The program is free, and bring yourself to the venue. Be attentive, participate, and learn from the lecturers. It is hassle-free. (Participant 3)</i></p> <p><i>Wala jud me nakagasto ani nga training kay provided man tanan like ang merienda, mga activity sheets, manila paper, pentel pen, ug uban pa. Ang among kaugalingon lang jud ang importanteng dad-on sa venue. (Participant 16)</i></p>
3. Time	<p><i>In this training, time is very important. They asserted that the allotted time for every session is 4 hours from 1:00 to 5:00 pm. Trainers need to begin the topic in each meeting before or on time to maximize it. The videos presented to the teachers lasted for 2 hours, and other videos lasted for 2 hours, so the remaining time was intended for evaluation, assessment, and activities.</i></p> <p><i>Teachers were given time to relearn everything. They do not need to sacrifice their time for their loved ones. (Participant 14)</i></p> <p><i>The LAC session sometimes started late, especially if the trainers had an important matter to attend with just like emergency matters. (Participant 10)</i></p> <p><i>The LAC session was scheduled every afternoon between 1:00pm to 5:00pm. (Participant 1)</i></p> <p><i>It is good that the LAC session is set for the afternoon because there is ample time, and teachers will not feel the hurry to get home. Sometimes, we finished early depending on the topic and discussion. (Participant 8)</i></p>
4. Roles of the Trainers	<p>One of the most important resources in the LAC session is teacher-mentor availability. They are very religious when conducting the training. Participant 9, a Grade 3 teacher, expressed:</p> <p><i>Since we only have two trainers in the school, we really need to adjust to their convenience in having the LAC session. I know that it is very exhausting on their part. It is already additional work for them aside from teaching....so we must consider their reasons.</i></p>

	<p>Teachers viewed their teacher-mentors during LAC sessions as speakers with authority. They have the responsibility to relay and share all the learning they got from the regional training. Thus, their sole function is to cascade.</p> <p><i>Honestly, our trainers were very role-oriented. They do not want everyone to be passive, especially during the discussion. (Participant 11)</i></p> <p><i>Our two teacher-mentor's diligence in facilitating LAC sessions is noticeable. You know, it is not easy to conduct this training for K-3, and I really admire their persistence and effort to guide, impart, and influence us. Nevertheless, the LAC session was not pursued on the scheduled date because they were not available due to some circumstances, like meetings or personal matters. (Participant 15)</i></p> <p><i>The role of the trainers as the facilitator of the training is not easy. They really need to be prepared and well-minded in their task. I am delighted that they are extending their time and effort for us to understand and learn out from what they have learned, too. This LAC session will not be successful if our facilitators are not active. (Participant 17)</i></p>
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The training program is efficient because teacher-mentors only need the necessary equipment to be used, such as laptop, LCD projectors, speakers, and others. These equipment and technologies were meaningful in carrying out the task of the training. Stosic (2015) defined educational technology as a systematic and organized process of applying modern technology to improve the quality of education (efficiency, optimal, real, etc.) and a systematic way of conceptualizing the execution and evaluation of the educational process, such as learning and teaching and help with the application of modern didactic teaching techniques. Also, it includes instructional materials, methods, and organization of work and relationships, i.e., the behavior of all participants in the educational process. Overall, the educational technologies used hugely impacted the training and accomplishment of LAC.

This kind of training program is profitable since teachers do not need to spend money anymore to acquire new knowledge and information. They only must prepare themselves during LAC sessions and engage in activities. However, teacher-mentors need money to produce activity sheets and documents to be given to the participants in every course as well as the snacks to be served. All of the finances in the LAC session were charged against the Maintenance and Other Operating Expenses (MOOE) of the school. As described by Gempes and Ochada (2018), Maintenance and Other Operating Expenses is the school budget downloaded from the government to all public schools for the utilization in running school operations. The budget includes the procurement of school supplies necessary for classroom teaching, utilities, and communication, training activities, graduation exercises, security, janitorial services, and minor school repairs as stated in the approved School Improvement Plan (SIP) for the current school year and in the Annual Improvement Plan (AIP) of the school. Accordingly, financial resources are an important key input in the school system since they provide the means of running all the affairs of an institution or organization and acquiring all the resources needed to achieve institutional objectives.

Following the scheduled date and time for the LAC made the professional development for teachers fruitful, as respondents identified. The training itself taught teachers to value and manage time wisely. As ascribed by Sood (2018), time management is the process of planning and exercising conscious control of time spent on specific activities to work smarter rather than harder. It is a juggling act of various things that help increase one's efficiency and a better work-life balance. Undoubtedly, the time allotted to the LAC made a significant and extensive contribution.

The roles of the teacher-mentors were indicated as one of the costs that made LAC a success in promoting the professional development of teachers. Their determination and hard work to share what they have gained were observable. As being trained in the region, their functions as mentors were highly needed for successful school-based mentoring.

4.3.2 Implementation

The 18 participants have varied views on the implementation of the training program through the school-based learning action cell. Based on their responses, the following six sub-themes are identified. Workshop, brainstorming, peer learning, experiential learning, active participation, and collaboration were being emerged.

The members of the workshop discuss and exchange views on a particular issue. The duration of the workshop may be from three to ten days, depending upon the gravity of the problem. Moreover, administrators and district heads should offer to either pay or help pay for the classes and workshops. The ELLN training program encourages teachers to indulge in workshops on enhancing their teaching skills and applying these skills in the classroom.

The ELLN training program made teachers innovate solutions to problems in the classroom, as observed through brainstorming. They generated creative ideas to solve problems within the group. During the training, teachers believed in creating concepts to answer a common classroom problem. Their metacognition is stimulated as each one of them thinks as one. This is anchored on Putman and Paulus (2009), whom they mentioned that brainstorming is a teaching method that puts people at the center and is predicated on the open expression of any ideas without worrying about criticism.

Teachers were confident that during their LAC session, they had learned a lot of experiences and insights from their co-teachers, who are their peers. The mentor-mentee relationship was observable. Also, their self-confidence is boosted. So, through this kind of training program, the Kinder-Grade 3 teachers learn to communicate freely on their notions with the assistance of the teacher-mentors.

Experiential learning involves learning from experience. Teachers' experiences throughout the years were productive and stimulating. Through the LAC session, seasoned and newly hired teachers benefitted from each other's experiences.

Active participation is a way of working that supports an individual's right to participate in the activities and relationships of everyday life as independently as possible. The individual is an active partner in his or her own care or support rather than

being passive. The individual is the expert who knows best the way of life that matters to him or her, and the worker always listens and takes this into account. For Gove and Wetterberg (2011), active participation is the consistent and simultaneous engagement of the minds of all the learners with the content of the lesson. Such participation increases the rate and degree of learning. Indeed, respondents viewed the ELLN training program as training that ignites active engagement and involves direct concentration.

ELLN training program created strong camaraderie and relationships among teachers in the grade level. They showed oneness in accomplishing the task. Roselli (2016) defined collaboration as a collective process from the beginning, where all the members are jointly involved in task performance. This does not imply that there cannot be a genetic differentiation of roles, but this is a spontaneous emergence of interactive dynamics.

Also, teachers firmly stated that they progressed professionally when the training program was implemented. Teachers' perception of the progress of the ELLN Training Program reveals these essential themes applied some useful traditional and latest strategies in teaching literacy and numeracy, understood the nature of Kinder-Grade III learners, and strengthened their skills in teaching and assessing children.

Teachers have learned that there are a few conventional methods that can be effective in teaching literacy and numeracy skills. It is not necessary that the latest strategies are the most applicable to use. This is supported by Wegner *et al.* (2013), who postulated that teaching-learning strategies must be organized systematically by the school as well as supported by teachers and their choice of teaching methods.

The implementation of the training program was beneficial to teachers in understanding the diverse nature of their learners. It is very significant for teachers to know children's different cultures, behaviors, attitudes, and characteristics to deliver appropriate instruction. A teacher who understands learners' strengths, weaknesses, and interests will be better able to help them to be successful academically. So, teachers who know how their kids learn can guide them and lead them to grow in their learning. Also, teachers who know their students as unique individuals can help them navigate their often confusing and anxiety-filled lives.

Assessing and improving teaching is best accomplished when multiple sources of evidence, such as self-reflection, student feedback, and peer observation, are well understood. Guskey (2013) exclaimed that teachers who develop useful assessments, provide corrective instruction, and give students second chances to demonstrate success can improve their instruction and help students learn. Thus, one of the assistance ELLN implementation offers is that teachers reinforce their skills in teaching and assessing learners, specifically in language, literacy, and numeracy development.

The seventh domain of the PPST is about the teachers' personal growth and professional development. It comprised of five strands, and the third to fifth strands discussed the professional development of teachers in engaging in activities and colleagues to improve their expertise in teaching. Mentoring is very distinguishable in this domain, which the ELLN program wanted to intensify in its professional

development component whereby the teacher-mentors guide and train their fellow teachers in understanding the importance of early language literacy and numeracy skills.

4.4 Recommended Factors that Lead to Effective and Efficient ELLN Training for Teachers

The participants commonly answered that the professional development component of ELLN could be more effective and efficient if these essential aspects were considered. Trainers, together with the principal, conduct an observation of all Kinder-Grade 3 teachers, apply the approaches and strategies in class, employ explicit teaching, provide learning resources on enhancing literacy and numeracy skills, and indulge a program for intermediate teachers in sustaining literacy and numeracy development. Furthermore, time consciousness and mechanism for sustainability of the LAC should be given attention to carry out more effective delivery of the training program.

The ELLN training program was ended with a demonstration. According to the recipients of the training, there were two selected teachers among the group to demonstrate teaching literacy and numeracy topics. The demonstration was the last activity the teachers did, and the school principal and the invited supervisor evaluated them. As reflected in the responses of the teachers, observation of class is a must to sustain the effectiveness and efficiency of the training.

As exclaimed by O'Leary (2013), classroom observation of teachers is an essential tool for education policy and research. By observing teachers in the classroom, it is possible to measure the impact of training programs and other interventions on teachers and, in turn, on student learning. Classroom observation can help education managers benchmark the performance of schools and school systems in important areas such as teachers' use of instructional time and educational materials, student engagement, and the use of best-practice teaching techniques. Thus, clinical observation will serve as the basis for the school principal to fully evaluate teachers' performance and the success of the ELLN training program.

The application of strategies and approaches in the classroom was noted by the teachers to implement the importance of ELLN vigorously. According to Lawson and Lawson (2013), teaching strategies help students learn the desired course contents and be able to develop achievable goals in the future. Teaching strategies identify the different available learning methods to enable them to develop the right approach to deal with the target group identified. Assessment of the learning capabilities of students provides a key pillar in the development of a successful teaching strategy. Hence, teachers mentioned that they have acquired various approaches and strategies in teaching and assessing. These must be applied in the classroom to trace their effectiveness in the teaching-learning situation. Through these strategies and methods, educators have a way to build up the literacy and numeracy skills of the children.

Explicit teaching involves directing student attention to specific learning in a highly structured environment. It is a teaching that is focused on producing specific learning outcomes and useful for introducing topics and particular skills. It provides

guided instruction in the basic understanding of required qualifications, which students can then build on through practice, collaboration, repetition, hands-on activities and developmental play. Explicit teaching was being taught during the training, which aids teachers in teaching basic literacy and numeracy skills effectively. Teachers strongly believe that utilizing explicit instruction will realize the goals of the ELLN training for teachers effectively and efficiently.

Literacy and numeracy of school-aged children will be intensified when essential learning resources are well-equipped. Most of the participants suggested that trainers must include instructional materials and assessment tools for teaching and assessing literacy and numeracy in the teachers' outputs. The implementation of ELLN's professional development will be effective and efficient if resources can be accessed anytime. As illustrated by the Association of American Publishers, educational materials invoke images of large, print, classroom textbooks with small type, outdated information, and content that covers the breadth but not the depth of a subject. The purpose of utilizing teaching and learning resources in class is to assist the teacher with the presentation and transmission of educational content and the achievement of educational objectives while aiding the students in acquiring knowledge and profiling different abilities and values (Busljeta, 2013). K-3 mentors ought to create and design innovative materials and activities that will develop learners' literacy and numeracy skills. These outputs will be used in the classroom and can be of great help in identifying learners' needs.

This kind of training program needs the cooperation of every educator to be sensible with time to understand the projected objectives fully. Every participant ought to bear in mind that time is precious when conducting training. Effective time management allows individuals to assign specific time slots to activities that are of importance. It is making the best use of time as time is always limited. Therefore, they need to manage their time so that they can attend important activities like LAC sessions.

One of the contributing factors to the standards of literacy and numeracy is the teaching skills and abilities. It has also provided a process for the profession to influence the quality of teacher training and continuing professional development (Meeks *et al.*, 2014). Thus, intermediate teachers in elementary grades need to have a training program that would enhance the primitive skills gained in Kinder-Grade 3 and prepare them to think critically.

The LAC session in school must not cease because this is one of the avenues for the teachers to involve themselves in professional growth and development. Their skills and abilities are heightened by engaging in learning opportunities. Thus, the learning process is continuous. Teachers need to develop their competencies professionally to give the exact information to the learners. This will be invigorated through stable Learning Action Cell or school-based training.

ELLN implementation will be more effective if the LAC session provides teaching and learning resources that can be used in the classroom. Through the LAC session, teachers can create teaching materials which apply to the learning needs of the learners.

Shown in Figure 3 is the final framework of the successful ELLN Professional Development Component Implementation.

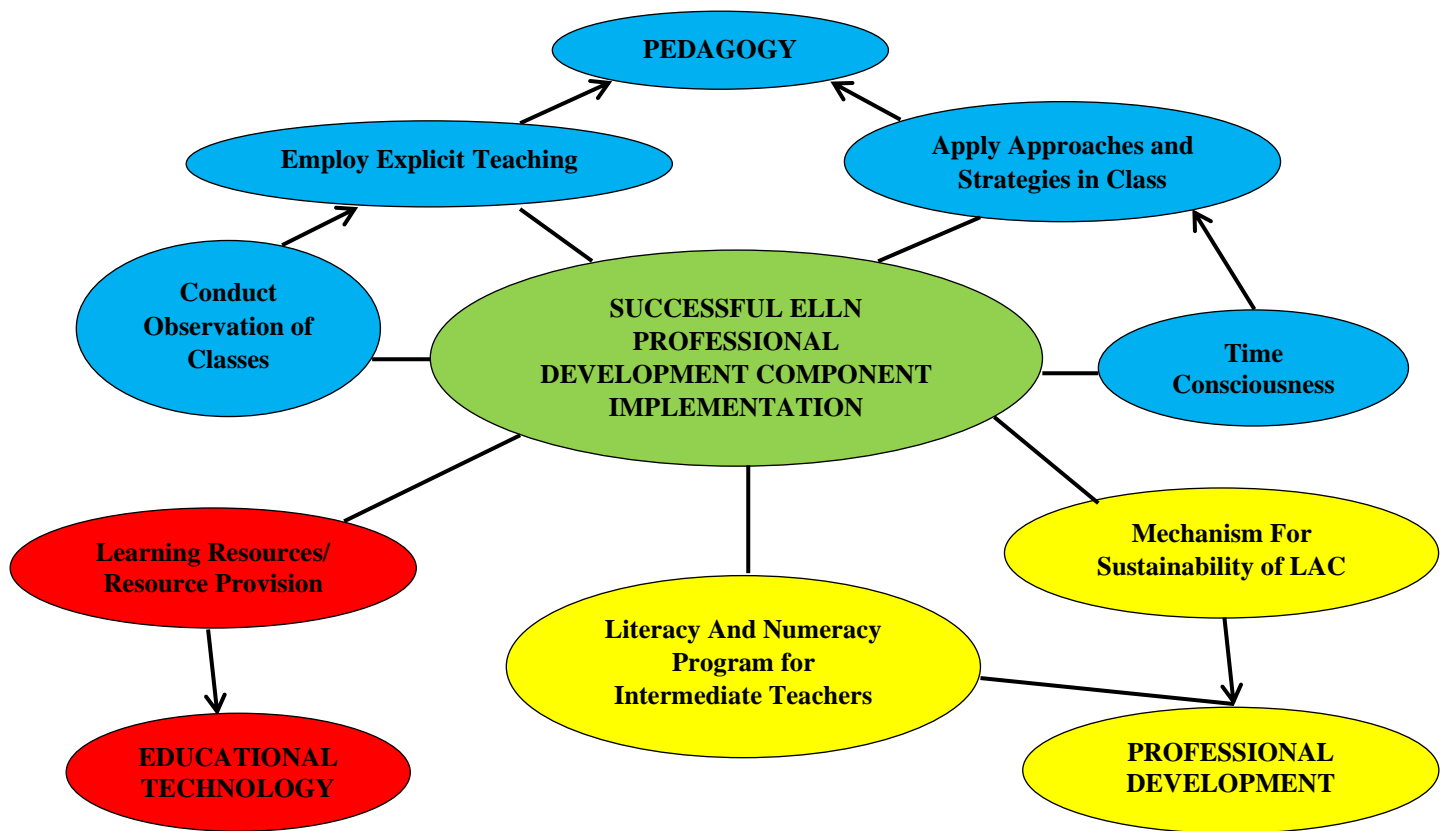


Figure 2: Framework for successful ELLN professional development component implementation

The framework shows the factors that are highly needed for the successful implementation of the ELLN professional development component in the school. These factors are based on the responses of the teachers as recipients of the program. Conducting observation of classes, applying the approaches and strategies in class, employing explicit instruction in teaching, and indulging literacy and numeracy program for intermediate teachers will make its administration more effective and efficient. Time consciousness, resource provision, and mechanisms for the sustainability of LAC need some attention for the effective delivery of the program. Moreover, all of these will make the ELLN training program improve, specifically in pedagogy, educational technology, and professional development of the teachers. The continuity of the training program lies in the factors mentioned.

To ensure teacher quality, DepEd established the Results-based Performance Management System (RPMS). It aligns the performance targets and accomplishments with the Philippine Professional Standards for Teachers (PPST). RPMS is an organization-wide process of ensuring that employees focus work efforts towards achieving DepEd's

vision, mission, values, and strategic priorities. It is also a mechanism to manage, monitor, and measure performance and identify human resource and organizational development needs (DepEd Order No. 2, s. 2015, p. 3). One of the Key Result Areas is Content Knowledge and Pedagogy, in which teachers must use a range of teaching strategies that enhance learner achievement in literacy and numeracy skills. With this, the school head must conduct an observation of the class and see to it that the teachers incorporate various strategies in teaching literacy and numeracy. It is one of the aims of the ELLN program that educators must be the source of knowledge in teaching and assessing learners' literacy and numeracy skills.

The RPMS tool is used by teachers 1 to 3 teaching in any grade level, therefore, strengthening the skills in teaching and assessing literacy and numeracy skills should not be offered only to Kinder-Grade 3 teachers. Intermediate teachers in Grades 4-6 must also be trained in this kind of program so that they can fully develop the necessary skills gained in the early grades.

The findings imply that school managers need to bear in mind the importance of sustaining different professional development activities for teachers. Training, seminars, and workshops can help teachers to grow professionally because they continue to heighten their competencies and skills, acquire new concepts and strategies, and learn more about the appropriate application of the approaches in the classroom. Moreover, it is the responsibility of the school administrator to carry out different learning plans to address the needs and insufficiencies of the teachers so that they can be effective and efficient facilitators of literacy and numeracy development.

School heads, as instructional managers, must include in their annual improvement plan or school improvement plan the provision of learning resources to fully realize learners' higher academic achievement in literacy and numeracy. These resources are very helpful for teachers in delivering instruction and desired learning to students. Also, they will easily teach certain topics if resources are already provided to assist in better learning.

The high performance of teachers at work can be achieved through different motivational factors and several learning opportunities given in school. That is why principals need to create and design activities that will aid teachers in developing their art of teaching and establishing effective pedagogy. This will help teachers to promote actual learning from the learners and apply it in real-life situations.

4.5 Implications

Based on the results and discussions, the following implications are made in relation to teachers' training and human resources:

- a) Teachers' training must be linked to further professional development opportunities through in-set training on topics of particular need, such as language and learning, language and literacy, assessment strategies, and how children learn mathematics. It very effective that every school has an ongoing

- professional development activity for the teachers so that they can enhance their expertise and share their experiences with other newly hired teachers in the field.
- b) The school head must develop school quality improvement plans that will improve teaching, learning, and assessing literacy and numeracy. Also, he/she should continue to establish school-based teacher mentoring to facilitate teachers' growth and development fully. School-based mentoring is one way to intensify the competencies of the teachers as well as nurture their collaboration in creating a solution to the problem.
 - c) The principal ought to look at the fundamental needs and opportunities of his subordinates, given that they are the most relevant people in achieving the goals of the ELLN program. If their needs are being addressed, they are competitive, productive, and motivated to work and do their accountabilities. Furthermore, the school manager must recognize their accomplishment because they can make the school's projects and programs successful. It is a good move for the administrator to know the different indicators that drive his/her subordinates to perform well and act on their duties and responsibilities in school. Therefore, school managers should consider the motivational factors of each employee as a valuable human resource in school.

5. Conclusions

Based on the findings, the following conclusions were drawn:

- 1) Attending the ELLN is useful for the K-level to Grade 3 teachers in enhancing their teaching and assessing skills, specifically in literacy and numeracy.
- 2) The ELLN training program provides the necessary knowledge for teachers that could improve their abilities in planning instruction and assessment. They also know when and how to incorporate appropriate strategies and assessment tools in the class.
- 3) Valuable resources should be provided in the realization and implementation of the ELLN training program to enrich learning avenues and activities for the teachers.
- 4) The recommended factors for effective and efficient implementation of the ELLN Professional Development Component must be considered to achieve its productive outcome fully.

6. Recommendations

Based on the drawn conclusions, the researcher came up with the following recommendations:

- 1) The Department of Education must continue to provide accessible training and seminars that support teachers in enhancing and broadening their skills and pedagogies in teaching and assessing early language literacy and numeracy.

- 2) Superintendents at the division level must sustain professional development for teachers through the Learning Action Cell in improving primary teachers' competencies in teaching literacy and numeracy.
- 3) Supervisors must evaluate the school principal as instructional managers to check his/her management and administration in intensifying the ELLN.
- 4) School heads must provide proposal-based school grants to enable them to carry out their teacher development activities.

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Conflict of Interest Statement

The author declares no conflicts of interest.

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References

- Busljeta, R. (2013). Effective use of teaching and learning resources. *Czech-Polish Historical and Pedagogical Journal*, 5/2, 55–69. <https://doi.org/10.2478/cphpj-2013-0014>
- Creswell, J.W., Klassen, A.C., Plano Clark, V.L., & Smith, K.C. (2011). Best practices for mixed methods research in the health sciences. *Behavioral and Social Sciences Research*. Retrieved from [https://obssr.od.nih.gov/sites/obssr/files/Best Practices for Mixed Methods Research.pdf](https://obssr.od.nih.gov/sites/obssr/files/Best_Practices_for_Mixed_Methods_Research.pdf)
- Department of Education Order 42, s. 2017. *National adoption and implementation of the Philippine professional standards for teachers* | Department of Education. Retrieved from <https://www.deped.gov.ph/2017/08/11/do-42-s-2017-national-adoption-and-implementation-of-the-philippine-professional-standards-for-teachers/>

- Department of Education Order 2, s. 2015. *Guidelines on the establishment and implementation of the results-based performance management system (RPMS) in the department of education*. Retrieved from <https://www.deped.gov.ph/2015/02/06/do-2-s-2015-guidelines-on-the-establishment-and-implementation-of-the-results-based-performance-management-system-rpms-in-the-department-of-education/>
- Department of Education Order No. 12 s. 2015. Guidelines on the early language, literacy, and numeracy program: professional development component. Retrieved from <http://www.deped.gov.ph/2015/04/10/do-12-s-2015-guidelines-on-the-early-language-literacy-and-numeracy-program-professional-development-component/>
- Department of Education and Skills (2010). A Draft National Plan to Improve Literacy and Numeracy in Schools. *Better Literacy and Numeracy for Children and Young People*. St Mac Dara's Community College, Templeogue, Dublin 6
- Gempes, G. & Ochada, N. (2018). The realities of maintenance and other operating expenses (MOOE) allocation in basic education system: unheard voices of public-school teachers. *International Journal of Scientific & Technology Research*, 7 (4). Retrieved from <https://www.ijstr.org/final-print/apr2018/The-Realities-Of-Maintenance-And-Other-Operating-Expenses-mooe-Allocation-In-Basic-Education-System-Unheard-Voices-Of-Public-School-Teachers.pdf>
- Gentry, R., Sallie, A. P., & Sanders, C. A. (2013). Differentiated instructional strategies to accommodate students with varying needs and learning styles. ERIC. Retrieved from <http://files.eric.ed.gov/fulltext/ED545458.pdf>
- Gove, A., & Wetterberg, A. (2011). The early grade reading assessment: applications and interventions to improve basic literacy. <https://doi.org/10.3768/rtipress.2011.bk.0007.1109>
- Greenhill, V. (2010). 21st century knowledge and skills in educator preparation. ERIC. Retrieved from <http://files.eric.ed.gov/fulltext/ED519336.pdf>
- Guskey, T. (2013). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3/4), 381–391. <https://doi.org/10.1080/135406002100000512>
- Lawson, M. A., & Lawson, H. A. (2013). New conceptual frameworks for student engagement research, policy, and practice. *Review of Educational Research*, 83(3), 432–479. <https://doi.org/10.3102/0034654313480891>.
- Meeks, L., Kemp, C., & Stephenson, J. (2014). Standards in Literacy and Numeracy: Contributing factors. *The Australian Journal of Teacher Education*, 39(7). <https://doi.org/10.14221/ajte.2014v39n7>.
- National Institute for Education and Development (2011). An investigation of literacy and numeracy skills at lower primary phase in Namibian schools. *Resource Development and Research*. NIED Okahandja. Retrieved from https://www.nied.edu.na/assets/documents/03Research/01LiteracyandNumeracy/RE-LI_National-Investigation_2012.pdf
- Nilsen, T., & Gustafsson, J. (2016). Teacher Quality, Instructional Quality and Student Outcomes: Relationships across Countries, Cohorts and Time. *International*

- Association for the Evaluation of Educational Achievement*, 2. Retrieved from <http://files.eric.ed.gov/fulltext/ED588361.pdf>
- O’Leary, M. (2013). *Classroom Observation: A guide to the effective observation of teaching and learning*. Retrieved from <http://ci.nii.ac.jp/ncid/BB15343985>
- Palinkas, L.A., Horwitz, S.M., Green, C.A. (2015). purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Adm Policy Ment Health*, 42, 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Pereira, C. M., & Gomes, J. F. (2012). The strength of human resource practices and transformational leadership: impact on organizational performance. *The International Journal of Human Resource Management*, 23(20), 4301–4318. <https://doi.org/10.1080/09585192.2012.667434>
- Putman, V. L., & Paulus, P. B. (2009). Brainstorming, brainstorming rules and decision making. *Journal of Creative Behaviour*, 43(1), 23-39. <http://dx.doi.org/10.1002/j.2162-6057.2009.tb01304.x>
- Roselli, N. (2016). Collaborative learning: Theoretical foundations and applicable strategies to university. *Propósitos y Representaciones*, 4(1), 219-280. <http://dx.doi.org/10.20511/pyr2016.v4n1.90>
- Rochon, M. (2017). Creative evaluation methods. Retrieved January 12, 2019 from <https://bizfluent.com/info-8481757-creative-evaluation-methods.html>
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective Reading instruction for Struggling readers: The role of Direct/Explicit Teaching. *Reading & Writing Quarterly*, 25(2–3), 125–138. <https://doi.org/10.1080/10573560802683523>
- Sood, A. (2018). *Time management*. Retrieved from <https://www.slideshare.net/slideshow/time-management-123699052/123699052>
- Stosic, L. (2015). The importance of educational technology in teaching. *International Journal of Cognitive Research in Science Engineering and Education*, 3(1), 111–114. <https://doi.org/10.23947/2334-8496-2015-3-1-111-114>
- Wegner, C., Minnaert, L. & Strehlke, F. (2013). The importance of learning strategies and how the project ‘Kolumbus-Kids’ promotes them successfully. *European Journal of Science and Mathematics Education*, 1(3), 138-143. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1108220.pdf>

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