

ERD 2019
Education, Reflection, Development, Seventh Edition
WHATSAPP WITH TEACHER-PARENT COMMUNICATION
WITHIN KINDERGARTENS

Vered Golan (a)*, Ion Albulescu (b)
*Corresponding author

(a) Babes- Bolyai University, Cluj- Napoca, Romania, veredgollan@gmail.com

(b) Babes- Bolyai University, Cluj- Napoca, Romania, albulescum@yahoo.com

Abstract

This paper presents the initial stage of a research that is still in process and designed to explore the perceptions of early childhood kindergarten teachers concerning their communication with parents in the digital era, following an intervention program " Kindergarten teacher- parents communication in the digital era". The research tool was a questionnaire, which was built specifically for this research and filled by a sample of 86 early-childhood kindergarten teachers in Israel about their communication with parents. This article Focuses on kindergarten teachers' perceptions before participating in the intervention program. The main findings show that most kindergarten teachers view parents as part of the kindergarten community; most of them use smartphones to communicate with parents and would like to have more face-to-face meetings with parents. They mentioned they would like to get more tools what to say or answer to parents and how to set boundaries and respect. Literature on communication with parents in early childhood education is scarce. While there are many studies on teacher-parent communication in schools, there is almost no research on early-childhood kindergartens, where teacher-parent communication is particularly important. The current study focuses on the challenges in early childhood teacher-parent communication and its patterns, especially in the digital era.

2357-1330 © 2020 Published by European Publisher.

Keywords: Digital communication, early childhood, kindergarten teacher, parental involvement.



1. Introduction

One of the greatest challenges in today's world is the fast-pace progress of the digital era. Technology drives us forward in every field of life, and we humans sometimes find it difficult to follow. In recent decades, there was an extensive progress in the use of technology and media in educational institutions for teaching and communication alike.

The main goal of this study is to explore the perceptions of early-childhood kindergarten teacher (KT) concerning their communication with parents in the digital era. This research focuses on the perceptions before participating in the intervention program " Kindergarten teacher- parents communication in the digital era", who developed for this research.

Many studies have been conducted about parent-teacher communication in the digital era (see, for example: Graham-Clay, 2005; Roman & Ottenbreit-Leftwich, 2016), but they all focus on elementary or high schools, while ignoring early childhood kindergartens.

In the past, parent-teacher communication was mainly based on face-to-face interaction. Today, in the age of digital and accessible communication, parents and teachers prefer to use new means to communicate while reducing the intensity of face-to-face interactions, which require effort and time.

1.1. Parents' Involvement in Education Systems

Epstein (1987) developed a theory that focused on the links between the school community and the student's home and family. She argues that both factors – school and home – affect the child, and there is no "pure" time in which the child is only affected by either one of them. In her many studies, Epstein (1982, 1985, 1986) proved that the communication and cooperation between the child's educational institution and their home is extremely important for their learning motivation and abilities.

Friedman's (1990) theory focused on the mutual relations between parents and their children's education systems. Friedman mentioned different levels of parental involvement, like alienation, avoidance, moderate involvement and extensive involvement. A few scholars explored the goals of parent-teacher relationships and searched for potential ways to improve it for the benefit of all parties involved (Olsen & Fuller, 2008; Wilder, 2013).

Vassalo (2000) described parents as the clients of the educational institutions. According to this view, the system should be adjusted to answer parents' demands, and not the other way around.

When talking about parents' involvement in their children's education at early childhood (EC), we must remember four key points: First, the parent is the main educator and guardian of the child. Second, early childhood education affects not only the child, but also their close surrounding (Bronfenbrenner, 1979, 1989). Third, listening to the parents and addressing their needs promote their engagement and present more opportunities to affect their infants (Venninen & Purola, 2013). Finally, always remember that a positive relationship between the parents and the educational staff are key for the parents to have a positive experience of the educational system from the very beginning (Knopf & Swick, 2007).

1.2. Early Childhood Kindergartens in Israel (ECK)

In Israel, children can enter ECK when they are three months old. Historically, these kindergartens were opened so that mothers could go back to work at the end of their maternity leave. Consequently,

kindergartens for children of up to 3 years old are mostly private institutions, which are supervised by the Ministry of Employment and Welfare.

ECK is the first encounter between parents and formal educational institutions, which may affect their future interactions and relationships with other educational institutions. Unlike schools, kindergartens offer less formal learning, in a more intimate, family-like atmosphere (Arnold, Zeljo, Doctoroff, & Ortiz, 2008).

1.3. Parent-Teacher Communication in Early Childhood Kindergartens

Parent-teacher communication in ECK is extremely important, more so than in schools. Since children are very young and often cannot express themselves, parents must be cooperative and open about their child's needs and difficulties in their communication with the educational staff. Hence, close relationship and mutual trust are key for a proper care for children in ECK (Wilder, 2013).

Previous studies identified a number of limitations, which might disrupt parent-teacher communication: (A) Parents' fear of being honest with teachers and getting a negative reaction (Freeman, 2009). (B) Parents' lack of time to be involved in the child's life (Freeman, 2009). (C) Parent-teacher communication is often created while bringing the child in or picking them up from kindergarten, which makes the encounters time-stressed and unfocused (MacNaughton & Hughes, 2011). (D) Teacher often find it difficult to accept and understand parents from different cultures with different opinions (MacNaughton & Hughes, 2011).

Haggerty, Hampton, Mitchell, and Pairman (2006) presented two important principles that should be applied to maintain effective relationships and communication with parents: First, the knowledge that parents have on their child is no less than the professional knowledge of the teacher. The second principle is that goals and aspirations should be shared and spoken by all parties.

Teacher-parent communication is very important for effective relations in any education system. As we can see, this connection is extremely important in ECK, and so, the communication challenges are greater and more significant as well.

1.4. Kindergarten Teacher- Parent Communication in the Digital Era

Over the last three decades, along with the introduction of internet, e-mails and smartphones, interpersonal communication was transformed completely. This transformation affected the education system as well, and particularly the way parents communicate with their children's education system.

Parents and educators communicate mainly through daily and periodical updates, or discussions about the child's achievements and grades, assignments or irregular behavior (Kosaretskii & Chernyshova, 2013).

The benefits of digital parent-teacher communication:

- Digital channels make teachers and parents more available. While they have less time to meet fact-to-face, the availability of digital communication means allows parents to be involved.
- Teachers can send group messages (Lunts, 2003) while still being able to get individual responses back.

- Information does not have to be transferred during work hours, but rather at any time, according to the teacher or the parent's convenience. Messages can be written at ease, while considering every word, and not under pressure or impulsively (Penny, 2006).
- Addi-Raccah and Yemini (2018) found in their study that participation in WhatsApp groups allows parents to remain updated about ongoing information, occurrences and problems in their children's classes. Online access allows parents to be more active, whether it is through collective or individual actions.

The disadvantages of digital parent-teacher communication:

- The lack of face-to-face communication – according to Mehrabian's (1969) theory, a message between two people is a single unit, which is composed of 7% verbal content, 38% voice dimension (volume and intonation) and 55% physical gestures and facial expressions (Mehrabian & Ferris, 1967). Hence, 93% of the message is transferred in a non-verbal form. According to Mehrabian (1969), words alone cannot convey an interpersonal message in the best possible way.
- The use of digital media might cause over-involvement of parents in the education system, or even cause them to interfere unnecessarily. This interference might harm the child's achievements and development in the education system (Lewis, 2002).
- Sometimes, parents' expectations about the communication channels and contents with teachers do not match teachers' expectations and directions (Bardroff- Zieger & Tan, 2012; Olmstead, 2013; Rogers & Wright, 2008).
- Communicating through text-message apps might lead to highly emotional conversations, in which the communicators do not think their words through (Occurs mainly in digital communication between parents and less with the teacher).
- Educational teams have no work phones and must communicate through their private devices. Hence, the team's privacy is violated (Olmstead, 2013).
- Digital communication might also cause fear among users who are afraid of leaving a digital footprint, which might later expose them. This fear might jeopardize the teacher-parent communication. Thus, we must think about the ethics of digital communication (Williams, 2007).

The current study was born out of the need of ECK staff to create healthy, effective communication with the parents for the benefit of their children. The digital era, which affects the education system as well, forces to reconsider existing communication channels between parents and teachers in light of the new reality we are facing today.

2. Problem Statement

A review of existing literature suggests that so far, a few studies have been made concerning digital communication between KTs and parents, which demonstrates the contribution of the current study.

There is a huge gap between theory and practice in this field. While KTs train to work with children, they must also learn how to deal with the parents, especially in early childhood. This research examines intervention program which develop on this particularly on this topic.

3. Research Questions

What are the kindergarten teachers' perceptions of the impact of the digital era on the patterns of communication with parents before participating in the intervention program?

4. Purpose of the Study

To examine the kindergarten teachers' perceptions on communication with parents in a digital era before, and after the intervention program.

5. Research Methods

This article refers to the first stage in the study that examines the KT's perceptions of their communication with their parents in the kindergartens, with an emphasis on the digital era.

5.1. Research Population

86 KTs in northern Israel coming from different sectors (Jewish religious, Jewish secular, Arab and Druze) had participated in this research. Each sector maintains its unique characteristics, and their education system is adapted accordingly.

The sample includes participants from three different positions:

1. Kindergarten managers (KM) (n = 18), responsible for pedagogic and administrative management of the kindergarten, as well as communication with parents and staff.
2. Kindergarten teachers, responsible for specific classes, in charge of the pedagogic management of the class, communication with parents and caring for the children (n = 24).
3. Educators who work in one of the classes under the supervision of the kindergarten teacher (n = 44).

This research examines two groups of KT: experimental group, who will participate in the intervention program, and control group, who won't participate in the intervention program.

5.2. Research Tools

Data were collected using a pre-treatment questionnaire, which was filled by both experimental and control groups.

The questionnaire was designed specifically for this research. To check the questionnaire's validity and reliability, it was first given as a pilot to a group of 49 KTs who were not part of the research sample. Validity, in this case, is the outcome of questionnaire and question tests. The analysis of the answers allows for evaluating their quality and the degree they were understood by respondents. If these outcomes show extremely high variability or extremely low variability, they may be useless for the future analysis, that is, they will either increase the unexplained error, or they will add little to the explained variance. A preliminary analysis of the pilot data shows overwhelming agreement in some answers. Teachers agreed mainly on the ultimate characteristics of teaching. For this, we changed the questionnaire to ask for ranking

rather than agreement. We tested two series of questions, to ensure the original meaning of capturing common context was met. We used exploratory factor analysis (EFA) to detect possible sub-contexts within each series – survey instrument. The first instrument covered leadership and competence in teaching and the EFA resulted in two distinct dimensions. The Cronbach alpha for all instrument items was 0.88, and by splitting this instrument to two dimensions we received alpha of 0.84 and 0.83. These values are high and above any acceptance level. The second instrument was about the role of education and educators. This was divided into two sub-contexts. Overall, we received alpha of 0.83 for internal consistency, and for the two dimensions we got 0.84 and 0.72, still beyond acceptance level.

The goal of the pre-intervention questionnaire was to examine the perceptions of KT's concerning their communication with parents in the digital era before they participated in intervention program.

The research hypothesis suggests that digital communication affects the relationship between KT's and parents in the aspects of parental involvement, content of the messages and frequency of communication performances.

5.3. Data Analysis

The Principal Axis Factoring (PAF) approach was used for the purpose of dimension extraction. This approach is a robust approach for small sample size and unknown distribution. Additionally, the PROMAX rotation technique was used, which allows for some correlation between extracted factors (Hefetz & Liberman, 2017).

6. Findings

The finding of this research relates to the KT perceptions on parental involvement, means of communications with parents and need of assistance.

6.1. Kindergarten teachers' perceptions concerning the role and position of parents

Table 01. Place of parents in kindergarten

| Variable | Category | Kindergarten manager | | Kindergarten teacher | | Educator | | Total | | χ^2 |
|----------------------------------|---|----------------------|------|----------------------|------|-----------|------|-----------|------|----------|
| | | Frequency | % | Frequency | % | Frequency | % | Frequency | % | |
| Place of parents in kindergarten | Inherent part of the community | 16 | 88.9 | 14 | 58.3 | 26 | 59.1 | 56 | 65.1 | 10.29 |
| | Report about children | 1 | 5.6 | 3 | 12.5 | 5 | 11.4 | 9 | 10.5 | |
| | Do not want them to interfere | 0 | 0.0 | 1 | 4.2 | 1 | 2.3 | 2 | 2.3 | |
| | Responsible for the children at home, not in kindergarten | 1 | 5.6 | 1 | 4.2 | 0 | 0.0 | 2 | 2.3 | |
| | Responsible for the | 0 | 0.0 | 5 | 20.8 | 12 | 27.3 | 17 | 19.8 | |

| | | | | | | | | | | |
|--|---------------------------------|--|--|--|--|--|--|--|--|--|
| | children at home and in daycare | | | | | | | | | |
|--|---------------------------------|--|--|--|--|--|--|--|--|--|

Table 1 suggests that the perceptions of KT's concerning parents do not vary across the different roles ($\chi^2(8) = 10.29, p > .05$). The majority of KT's in all three roles agree that the parents are an inherent part of the kindergarten's community (88.9%, 58.3% and 59.1% of KMs, KT and educators, respectively). The findings suggest that the notion of parents as part of the kindergarten's community is stronger among KMs compared to teachers and educators.

Only a handful of KT's said they are not interested in partnership with parents, and some even said they would rather leave the parents out, but these cases were rare. While the rate of community supporters among the teachers and senior teachers was not as high as in the case of managers, no significant differences were found, and it seems all staff members view parents as an integral part of the kindergarten system.

6.2. Communication channels preferred and accepted by KT's

Table 2 presents the findings concerning different communication channels.

Table 02. Means of communication with parents

| Variable | Category | Kindergarten manager | | Kindergarten teacher | | Educator | | Total | | χ^2 |
|-------------------------------------|-------------------------------|----------------------|------|----------------------|------|-----------|------|-----------|------|----------|
| | | Frequency | % | Frequency | % | Frequency | % | Frequency | % | |
| Means of communication with parents | Personal note / letter | 1 | 5.6 | 1 | 4.2 | 3 | 6.8 | 5 | 5.8 | 0.20 |
| | Text messages | 15 | 83.3 | 20 | 83.3 | 24 | 54.5 | 59 | 68.6 | 8.27* |
| | E-mail | 5 | 27.8 | 1 | 4.2 | 2 | 4.5 | 8 | 9.3 | 9.21** |
| | General note on message board | 12 | 66.7 | 5 | 20.8 | 10 | 22.7 | 27 | 31.4 | 13.18** |
| | Face-to-face communication | 16 | 88.9 | 23 | 95.8 | 40 | 90.9 | 79 | 91.9 | 0.77 |
| | Phone calls | 13 | 72.2 | 15 | 62.5 | 26 | 59.1 | 54 | 62.8 | 0.94 |

The analysis shows that text messages were marked as the most common way of communication – managers and teachers use it frequently (83.3% in both), while educators use it less frequently (54.5%). It may be concluded that the frequency of text messages varies across the different roles ($\chi^2(2) = 8.27, p < .05$).

The use of a parents' message boards (a message board hanged at the kindergarten's entrance where messages and photos are posted) is very popular among managers (66.7%), but less so among KT's and educators (20.8% and 22.7%, respectively), pointing out different patterns of communication between managers, teachers and educators ($\chi^2(2) = 13.18, p < .01$).

Letters and e-mails were found to be used less frequently across all roles. When compared to text or digital communication, almost all KT's (90% or more), across all roles, said they would rather meet the parents face-to-face.

Additionally, we can see in Table 3 that a large majority of all staff members (72.3%) said digital communication facilitates their interactions with parents.

Table 03. Digital communication

| Variable | Category | Kindergarten manager | | Kindergarten teacher | | Educator | | Total | | χ^2 |
|--|----------|----------------------|------|----------------------|------|-----------|------|-----------|------|----------|
| | | Frequency | % | Frequency | % | Frequency | % | Frequency | % | |
| Do digital means make it easier to communicate with parents? | No | 2 | 11.1 | 4 | 18.2 | 16 | 37.2 | 22 | 26.5 | 5.50 |
| | Yes | 16 | 88.9 | 18 | 81.8 | 27 | 62.8 | 61 | 72.3 | |

6.3. Kindergarten teachers' need for guidance and tools in their communication with parents

Table 04. Training in communication with parents

| Variable | Category | Kindergarten manager | | Kindergarten teacher | | Educator | | Total | | χ^2 |
|---|----------|----------------------|------|----------------------|------|-----------|------|-----------|------|----------|
| | | Frequency | % | Frequency | % | Frequency | % | Frequency | % | |
| Would you like to get some help in your communication with parents? | No | 3 | 16.7 | 5 | 21.7 | 16 | 38.1 | 24 | 71.1 | 3.61 |
| | Yes | 15 | 83.3 | 18 | 78.3 | 26 | 61.9 | 59 | 28.9 | |

Table 4 shows that 71.1% of all staff members said they would like to get some assistance in communicating with parents, while 28.9% said they do not need any help. KT's wrote statements, for example: "I want tools what we can and should write to parents in text messages", "how can I communicate in a way that no one will hurt?"

This finding shows that teachers do not get enough tools, help or support in the various aspects of parent-teacher-communication, and should get more training concerning these aspects.

6.4. Discussion

Previous studies found that parents' involvement in their children's education system is crucial for their academic and developmental achievements (Epstein, 1987; Friedman, 1990). It was also found that differences between teachers' and parents' perceptions concerning the role of parents in the education system may cause tensions in the relationship between them (Tana, 2014). The findings of the current study suggest that many KT's and educators view parents as an inherent part of the system, involved in decision making and in the kindergarten routine. A lower percentage argued that parents should not be involved in everyday decisions, and that this part should be left to professionals alone.

Previous studies that focused on teacher-parent communication channels showed that some differences arise from different needs of parents and teachers when it comes to communication and relationships (Bardroff- Zieger & Tan, 2012; Rogers & Wright, 2008).

The current study suggests that KT's and educators prefer sending information through text messages, mainly due to the higher accessibility of these tools (see Table 2). The preferences of KT's when it comes to communication channels are particularly important, since their needs of communication are different.

A review of existing literature suggests that so far, no studies have been made concerning the training and guidance of KT's in their communication with parents, which demonstrates the contribution of the current study, who is a pioneer in this field.

7. Conclusion

The study sheds light on the perceptions of KT's regarding communication with parents in the digital era. KT's expresses their belief that parents should be a part of the kindergarten community and communication with them is very important in early childhood. Means of communication have changed and KT's Express preference to communicate mainly through text messages. The digital communication invites many challenges: availability 24 hours a day, lack of privacy, lack of face to face reactions etc'.

The main conclusions from this phase of the study point out the need to train and guide KT's and staff in managing their communication with parents.

This study is being carried out in Israel, and it is important to explore this topic in future research in other countries and cultures as well.

In later stages, the researcher creates an intervention program for kindergarten staff, focusing on these specific challenges and difficulties emerged at this stage of the study. The purpose of the intervention program is to help KT's learn to use the existing communication channels in the digital era more correctly and effectively and get tools for dealing with communication in a rapidly changing world.

Contribution of research to early childhood knowledge will be another layer in understanding the needs of KT's in relation to communication with parents in the digital era.

References

- Addi-Raccah, A., & Yemini, M. (2018). *What is up? Parental WhatsApp Discussion in Diverse Educational Settings in Israel*. Multicultural Education Review.
- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent Involvement in Preschool: Predictors and the Relations of Involvement to Preliteracy Development. *School Psychology Review*, 37(1), 74-90.
- Bardroff- Zieger, L., & Tan, J. (2012). Improving Parent Involvement in Secondary Schools through Communication Technology. *Journal of Literacy and Technology*, 13(1), 30-54.
- Bronfenbrenner, U. (1989). *Ecological systems theory. Annals of Child development: A research annual: Six theories of child development*. Greenwich, CO: JAI Press.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.
- Epstein, J. L. (1987). Toward a Theory of Family- School Connections: Teacher Practices and Parent Involvement. In K. Hurrelmann, F. X. Kaufmann, & F. Losel (Eds.), *Social Intervention: Potential and Constraints* (pp. 121-136). Berlin- New York: Walter de Gruyter.

- Epstein, J. L. (1986). Parents' Reactions to Teacher Practices of Parent Involvement. *Elementary School Journal*, 86, 277-294.
- Epstein, J. L. (1985). A Question of Merit: Principals' and Parents' Evaluations of Teachers. *Educational Researcher*, 14, 3-10.
- Epstein, J. L. (1982). Student Reactions to Teacher Practices of Parent Involvement. In *the annual meeting of the American Educational Research Association*. New York.
- Freeman, M. (2009). 'Knowledge is Acting': Working-Class Parents' Intentional Acts of Positioning within the Discursive Practice of Involvement. *International Journal of Qualitative Studies in Education*, 23(2), 98-181.
- Friedman, I. (1990). *Community School: Theory and Practice*. Jerusalem: Magnes Press, Hebrew University, Henrietta Szold Institute, Harry Research Institute of Behavioral Sciences.
- Graham-Clay, S. (2005). Communicating with Parents: Strategies for Teachers. *School Community Journal*, 15(1), 117-129.
- Haggerty, M., Hampton, V., Mitchell, L., & Pairman, A. (2006). *Teachers, Parents, and Families working together in Early Childhood Education*. New Zealand Council for Educational Research.
- Hefetz, A., & Liberman, G. (2017). The Factor Analysis Procedure for Exploration: A Short Guide with Examples. *Culture and Education*, 29(3), 526 - 562.
- Knopf, H., & Swick, K. (2007). How Parents feel about their Child's Teacher/School: Implications for Early Childhood Professionals. *Early Childhood Education Journal*, 34(4), 291-296.
- Kosaretskii, S. G., & Chernyshova, D. V. (2013). Electronic Communication between the School and the Home. *Russian Education and Society*, 55(10), 81-89.
- Lewis, A. C. (2002). Building connections with Parents. *Phi Delta Kappan*, 84(4), 60-259.
- Lunts, E. (2003). Parental Involvement in Children's Education: Connecting Family and School by using Telecommunication Technologies. *Meridian: A Middle School Computer Technologies Journal*, 6(1), 1-8.
- MacNaughton, G., & Hughes, P. (2011). *Parents and Professionals in Early Childhood Settings*. England: Open University Press.
- Mehrabian, A. (1969). Methods and Designs- Some Referents and Measures of Nonverbal Behavior. *Behavior Research, Methods & Instruction*, 1, 203-207.
- Mehrabian, A., & Ferris, S.R. (1967). Inference of Attitudes from Nonverbal Communication in two Channels. *Journal of Consulting Psychology*, 31(3), 248-252.
- Olmstead, C. (2013). Using Technology to Increase Parent Involvement in Schools. *TechTrends*, 57(6), 28-37.
- Olsen, G. W., & Fuller, M. L. (2008). *Home and School Relations: Teachers and Parents Working Together* (4th ed.). Retrieved from [https://www.pearsonhighered.com/program/Olsen-Home-and-School-Relations-Teachers-and-Parents-Working-Together-4th Edition/PGM44131.html](https://www.pearsonhighered.com/program/Olsen-Home-and-School-Relations-Teachers-and-Parents-Working-Together-4th-Edition/PGM44131.html)
- Penny, H. (2006). Technology: We have come such a long way. *Montessori Life*, 18(2), 9.
- Rogers, R., & Wright, V. (2008). Assessing Technology's Role in Communication between Parents and Middle Schools. *Electronic Journal for the Integration of Technology in Education*. Retrieved from: <http://ejite.isu.edu/Volume7/Rogers.pdf>
- Roman, T. A., & Ottenbreit-Leftwich, A. T. (2016). Comparison of Parent and Teacher Perceptions of Essential Website Features and Elementary Teacher Website Use: Implications for Teacher Communication Practice. *Journal of Digital Learning in Teacher Education*, 32(1), 13-25.
- Tana, A. (2014). The Importance of School- Family Communication in the Teachers' Point of View in Albania. *Journal of Educational and Social Research*, 4(1), 273-277.
- Vassalo, P. (2000). *More than grades: How choice boosts Parental Involvement and Benefits Children*. U.S.: Cato Institute.
- Venninen, T., & Purola, K. (2013). Educators' views on Parents' Participation on Three Different Identified Levels. *Journal of Early Childhood Education Research*, 2(1), 48-62.
- Wilder, S. (2013). Effects of Parental Involvement on Academic Achievement: A Meta-Synthesis. *Educational Review*, 66(3), 1-21.
- Williams, B. T. (2007). "Literacy and Identity Trust, Betrayal, and Authorship: Plagiarism and how we perceive Students". *Journal of Adolescent & Adult Literacy*, 51(4), 350-354.