

# International Journal of Education & the Arts

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<http://www.ijea.org/>

ISSN: 1529-8094

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Volume 16 Number 10

June 19, 2015

## **Improv and Ink: Increasing Individual Writing Fluency with Collaborative Improv**

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Citation: DeMichele, M. (2015). Improv and ink: Increasing individual writing fluency with collaborative improv. *International Journal of Education & the Arts*, 16(10). Retrieved from <http://www.ijea.org/v16n10/>.

### **Abstract**

This article explores how short form/comedic improvisational theater impacts the development of writing fluency. Students in all disciplines need to be able to purposefully write, however by the time students reach high school many have already given up trying to express even their own thoughts in free writing. Two quasi-experimental action research studies in two school districts, one urban and one suburban, were conducted to determine if the length of the students' writing would increase after exposure to a sequence of improv story-telling and story-writing games. Data analysis revealed that both regular education and special education populations showed increases in both their word and sentence usage. The article examines how improv's collaborative nature supported by the rule of "Yes, and..." may address deficits in both social-emotional and literacy skills that effect writing fluency.

## **Introduction**

The head down on the desk with the blank paper peeking out, the paper with only a few lines of writing and the cries of “I don’t know what else to write,” are a familiar occurrence in many classrooms where writing is required. A student may feel only temporarily reluctant; or they may have become consistently resistant to writing assignments. In either situation it becomes increasingly difficult to assess writing proficiency, content mastery or to teach structure, mechanics and style. With standardized tests demanding well written answers from students, it is crucial that students overcome their reluctance or inability to engage in the writing process.

An unwillingness to write may or may not be caused by a student’s proficiency level. Addressing this, teachers often use two external prompting strategies: prompting by the teacher and high interest writing prompts. The benefits attained when the teacher prompts the students to write consecutive thoughts, are often temporary as students come to rely on it for each assignment. This reliance can foster a state of learned helplessness (Jensen, 2000) and may make some students feel “dumb,” prompting even more resistance. High interest or fun writing topics or assignments can prove temporarily effective as students may forget their prior reservations about writing and engage for that assignment. Students however fail to translate that enthusiasm to topics they find “boring.” These external supports intended to facilitate student writing lack adequate evidence of effectiveness and study (Graham & Perin, 2007).

Teaching high school social studies at a school that embraced writing across the curriculum, students were regularly assigned journals, essays, short answer identifications, and research papers. I frequently found myself run ragged from “helping” many students with external prompting. Students started to receive drama and short form improvisation (improv) training from other classes, clubs and from concepts and structures integrated into their social studies class. Through the integration of these concepts and skills, interpersonal and communication skills developed, fostering an overall class environment conducive to learning. Social-emotional growth commonly associated with drama instruction occurred, improving both the teaching and learning environment (McMaster, 1998; Smith & McKnight, 2009; Yaffe, 1989). Cooperative and collaborative groups became more effective. Disengaged students became enthusiastic learners. Tolerance, respect and understanding between students were observed. Behavior management issues of individual students decreased as those individuals modified their own behavior. Sawyer (2003) states, “...improvisation contributes to the development of pragmatic and social skills by giving children an opportunity to practice how to collectively manage an ongoing interaction” (p.4).

An unanticipated result was observed when writing assignments were given. Students did not seem to need as much prompting. Moans and whines of not being able to think of what to write disappeared. Students' writings seemed longer. One student, who consistently wrote only a couple of lines was now filling a page. When asked about the change, she looked up for a moment, smiled and confidently said, "Yes, and...!"

"Yes, and..." is the most essential and powerful rule of improvisational theater or improv for short. Improvisational theater, began its evolution into a distinct art form starting in the 1950's under the direction of Paul Sills, son of Viola Spolin, who is regarded as the mother of improvisation and internationally recognized as the founder of Theater Games. With specific rules, such as "Yes, and..." and defined structures, two general formats emerged, long form improv which may take 40 minutes or more; and short form improv that consists of short 3-5 minute games. The foundational rule of improv, "Yes, and..." prompts the actor/player to accept the offer of another player, building upon it, then giving their offer, which is then accepted by another. Through the consistent practice of "Yes, and..." individuals learn to suspend their judgement of themselves and of others'. Each new offer will take an idea or scene into a new, unscripted, spontaneous direction. "Yes, and..." allows storylines to move forward and the ensemble to contribute and create in collaboration.

This frame of "Yes, and..." also distinguishes improv, from other improvisational activities. Like improv, improvisational activities, are unscripted, experiential, and learning centered, but are not necessarily collaborative and lack the frame of "Yes, and..." Research that discusses the use of improvisation in the classroom often does not distinguish between improvisational activities like role-playing and improvisational theater/improv.

Theorizing that the students had independently adopted "Yes, and..." as an internal prompt when writing, two quasi-experimental action research studies were conducted to reveal if students' word and sentence usage increased after being exposed to the concept of "Yes, and..." Using improv story-telling games with corresponding improv story-writing games, students first created collaborative oral narratives, then transitioned to collaborative written narratives and finally composed individual narratives. To determine if fluency developed, word and sentence usage in the students' journal writing assignments were collected. Having already experienced the polite, yet dismissive, smiles from fellow educators regarding the effectiveness of improv on the development of literacy skills even after they were presented with existing research, as well as school based anecdotes of student success and previously conducted class surveys; this quantitative approach was chosen to best answer the question and to possibly demonstrate that participation in improv may produce quantifiable outcomes.

### Review of the Literature

Upon completion of the two studies, data indicated that participation in the sequence of improv games enabled students to increase their writing fluency. Seeking to explain why such results were attained, it became evident that relevant research regarding the use of improv to increase writing fluency was lacking. That is not surprising since improvisational theater has only recently gained wide spread attention since the late 1990's with the television show, *Whose Line is it Anyway*. Existing drama research that focuses on improvisational activities, and drama's effect on the development of literacy skills, typically refer to improvisational role-playing activities (Kardash & Wright as cited in Podlozny, 2000; Mc Master, 1998; Wagner, 1998; Wilhelm, 2007; Yaffe, 1989). Although useful to support commonalities shared with improv, this body of research lacks relevance when the intent is to examine the impact of improv's defined collaborative structure and its rule of "Yes, and..." Studies that do include short form improv games often include other types of improvisational activities that, convolute clear understanding of the effectiveness of short term improv games related to targeted outcomes. For example, Smith and McKnight (2009) report on a 2005 study in which The Second City Educational Program used improv games to improve teaching and learning in elementary and middle schools in Chicago. Short-form improv games were used and literacy was a focus, however the method used in exploring improvisation's effect on writing was that of improvisational role-playing to develop text and not exclusively the short-form games of improvisational theater. Improvisational activities, like role-playing, are a different intervention than improv; and therefore a direct comparison with such studies lacks relevance.

Another reason why research is lacking on the topic of this study becomes evident when looking at trends in literacy research. Graham & Perin (2007) report that recent literacy research focuses predominantly on reading; a surprising fact given that only 24% of American youth, in grades 8 and 12, score proficient in writing (The Nation's Report Card: Writing, 2011). Furthermore, the available research on writing tends to focus on strategies to teach the writing process rather than investigating how to reach the reluctant writer. There also remains a "serious gap in the literature" in regards to reaching low-income, urban, low-achieving adolescent writers, including those with special needs (Graham & Perin, 2007, p. 25).

To better understand the relationship between improv and writing, the review of research based on improvisational theater, emergent literacy and musical improvisation, is explored. Podlozny's (2000) meta-analysis on drama's effect on the development of oral language and writing skills also helps to support improv's ability to development writing fluency. Although the meta-analysis utilized improvisational activities like role-playing or improvised dialogues, therefore lacking a direct correlation for comparative purposes, it still provides information relevant to understanding how improv impacts the development of writing fluency.

In the two studies contained in this article, high school age students transitioned from collaborative speaking to collaborative writing and finally to individual writing. Research regarding how individuals move from speaking to writing is concentrated on the emergent literacy of young children. Despite the difference in the age of the subjects, emergent literacy research may still help to clarify why improv can develop writing skills, even on the adolescent level. In terms of research involving at what age drama instruction will best transfer verbal skills, the evidence is still inconsistent with some studies showing greater benefits to younger children and some to older children (Podlozny, 2000). Due to the lack of comparable research on improv and the subsequent use of other types of studies to help understand its role, the age of participants in referenced studies range from Pre-K to adult.

### ***Improvisation in Drama Research***

In a meta-analysis of nearly 80 studies from the last thirty-five years, Podlozny (2000) found that drama instruction, which included various types of improvisational activities, like role-playing, produced a significant effect on verbal areas such as reading, comprehension, oral language ability and writing. This review will focus on the findings within the oral language and writing studies. The findings in this meta-analysis find support and contradiction from the studies contained in this article. Podlozny's findings provide insight and direction for future research of short-form improv and its ability to effect writing fluency, as well as acquisition of other language arts skills.

The meta-analysis of both the oral language and writing studies showed that students transferred skills learned through drama not only to immediate assessment, but also to mastery of new material. Transference within the writing studies is of particular interest because students typically developed story ideas through improvisation then drafted those stories or wrote new ones. Although the approach presented in this article differs, with students instead writing narrative stories spontaneously and collaboratively, Podlozny's findings support the ability of students to transfer skills developed through improvisation to new material.

Other areas of focus relevant in this meta-analysis, include the impact of the age of the students, the length of exposure to drama activities and the populations involved. Oral language and writing studies showed positive and robust effects for all involved age groups. Studies focused on oral language revealed positive effects involving students from Pre-K to seventh grade, with the strongest effect for students over the age of 9. Writing studies focused on grades 1-9 also showed strong effects with greater effects found for younger students in first or second grade rather than students in grades 8 and 9. Interestingly, analysis showed that drama instruction between 315-720 minutes showed a greater effect than longer exposure when the outcomes were oral language and writing. Student populations described as average,

remedial readers, emotionally disturbed, learning disabled and of lower socio-economic status were equally effected.

### ***Development of the Narrative***

Sawyer (2002) explains that the contributions of social, improvisational, pretend play to narrative skill have been “widely studied both by narrative researchers and by researchers whose primary interest is emergent literacy” (p. 320). Studying 5 year olds, Sawyer (2002) used improv games framed by basic story structures and genre to describe the concept of collaborative emergence and to explain the connection between the narrative and improvisation. He contends that improvisation, with its “moment to moment, processual, contingent nature” (p. 33) where children co-create within a social and collaborative structure, allows for the emergence of narrative literacy.

Sawyer (2002, 2003) found that two elements contained in improv positively effected the development of narratives. First, improvisational play including the use of a scaffold or loose plot outlines produced coherent narratives Secondly, studies of adult improvisational troupe performances demonstrated that when actors stepped out of their role and used out of character techniques, plot lines gained complexity (Sawyer, 2003). The games used in this sequence asked students to act as narrators, thus allowing for the formation of more complex narratives. Sawyer’s research does not discuss a relationship between collaborative dialogue and individual writing; however it does validate improv as an effective strategy to collaboratively create complex, well-formed and coherent narratives.

Podlozny’s (2000) meta-analysis of drama studies acknowledged the impact of plots on the development of oral language and writing skills. Plots were considered structured if they followed a story or script, and unstructured if they were guided by a theme. Oral language development studies included students from Pre-K through seventh grade. The treatment groups participated in creative dramatics that included improvisational activities. It appeared that unstructured plots facilitated oral language skills more than the structured confines of a story; however it was also found that a combination of structured and unstructured plots were associated with larger effect size than studies using only one or the other (Podlozny, 2000). The writing studies showed that structured plots were associated with larger effects.

Viewed together, Sawyer and Podlozny’s assessment of the importance of plot in the development of oral language and writing skills helps to clarify improv’s role on the development of writing fluency by extending the combination of written narrative and improv theater. Improv’s structures support both language and writing development. The collaborative nature of improv games framed by “Yes, and…” nurtures both narratives and

dialogues. Improv story-telling games provide an additional framework, by introducing story structure and later genre in the more advanced story-telling games.

### ***Internalization of Speech***

For the purposes of this work, it was originally theorized that the students internalized “Yes, and...” while participating in collaborative improv games and that by using “Yes, and...” as an internal prompt they were able to increase the length of their writing. Consistent with Vygotsky’s (1978) ideas of inner speech, in which external speech, or “self-talk” is gradually internalized; the transition from the oral use of “Yes and...” in beginning collaborative improv games, to the internalization of “Yes, and...” before speaking in more advanced improv games, mirrors the progression of literacy described.

### ***Moving from Speaking to Writing***

The process of engaging students in oral improv games and then transitioning to written improv games honors the connection between a student’s development of oral and written language skills. Although the development of oral language supports the development of writing, the transition from speaking to writing is more complicated than just “talk that is written down” (Wagner 1998, p.118). Britton, Burgess, Martin, McLeod, and Rosen, (1975) recognize the relationship between written language, inner speech and the social nature of expressive language. Described as oral, sharing context of meaning and feeling trust in a relation to a listener, Britton et al. (1975) contends that this expressive language “...may be the first step in the development of writing abilities”(as cited in Wagner, 1998 p.120). The transition from oral speech to writing, however, is more complex than just writing speech down on paper. Moffit (quoted in Wagner, 1998) explains, “the most critical adjustment one makes [in learning to write] is to relinquish collaborative discourse, with its reciprocal prompting and cognitive cooperation, and to go it alone” (p. 118). The transition from oral collaborative improv games to written collaborative improv games and then finally to individual writing that occurred in both studies respects the complexity of this process.

### ***A Multi-Modal Approach Develops Writing***

Improv games are multimodal by nature, embracing movement and nurturing visualization and imagination which all impact the development of writing. Wagner (1998) cites numerous emergent literacy studies showing that “when children are making the transition from oral to written language they give their early writing a multimodality associated with gesture and graphics” (p. 120). Improv story-telling games, used in this work, allowed for both gesture and greater movement by the students. In addition to the kinesthetic elements of improv, the constant use of imagination and creative thinking during improvisation increases one’s ability to form mental images (Yau as cited in McMaster, 1998). McKnight (2000) and Wilhelm

(1997) also recognize improv's role in helping students visualize or "see text" as mental images, which consequently enhances "their ability to decipher and comprehend meaning in existing texts as well as to create expressive texts of their own through moving, speaking, and writing" (as cited in Smith & McKnight, 2009. p.7).

### ***Musical Improv Offers Insight***

Both theatrical and musical improvisational structures follow the "Yes, and..." frame in which one party accepts another's offer and incrementally builds upon it before passing it back or along to another. Preliminary data shows that when musicians are improvising back and forth with each other, essentially using a "Yes, and..." frame, a part of the brain that is involved in language and expressive communication is active (Limb, 2010). This research may not explain why improv supports writing fluency, but it does reveal that the processes involved when using "Yes, and..." even when used musically and not with spoken or written language, still activates a language center of the brain. Another interesting finding shows that when musicians are improvising, the part of the brain that controls self-editing is turned off and the part of the brain associated with self-expression is active (Lopez-Gonzalez & Limb, 2012). In theatrical improv, the frame of "Yes, and..." inhibits the practice of not judging the offers of other's, but accepting and building off of them, thereby also gaining the confidence that one's own offers will also not be judged. Considered a rule of improv, "Don't judge," is an outcome of "Yes, and," and leads to the fast paced, creative, spontaneous narratives/scenes that are created in each game.

### ***Improv Motivates and Creates Engagement***

The structure of improv produces instructional approaches that engage, reengage and motivate learners. Through its collaborative, social and learner-centered, fast paced, and visual environments, improv serves as an instructional strategy capable of engaging current generations of students (Berk & Trieber, 2009). With students engaged, improv provides a deeper understanding through its constructionist approach (Sawyer, 2006). Crucial for engagement and mastery, motivation through participation in improv is sustained through five basic human needs, as described by Glasser (1998): survival, belonging/connectedness, power/competence, autonomy and fun. Improv's multi-model nature addresses multiple intelligences (Gardner, 1983) and different learning styles. Issues of diversity, cultural relevance and authenticity are satisfied as students' offers will include their interests, life experiences, as well as their educational and curricular exposure. The structure of improv supports instructional strategies and approaches that successfully engage as well as reengage students with a history of failure or who have become marginalized (Smith & McKnight, 2009; Yaffe, 1989).

### ***Direction of Research***

Emergent literacy studies illuminate the transition from social interactional speech, (Britton, 1975; Sawyer, 2002, 2003) with its use of gestures (Wagner, 1998), to internalization or inner speech (Moffet, as cited in Wagner, 1998; Vygotsky's, 1978) as an essential precursor to the development of writing. Sawyer's (2002, 2003) work with the development of narrative literacy reveals that improv's collaborative structures guide students in the creation of well-formed and complex narratives. Together, emergent literacy studies and Sawyer's work with improvisation and narrative literacy, form a framework that helps to define how improv impacts the development of writing fluency. Future research regarding the acquisition of literacy involving older children, adolescence and young adults will strengthen this understanding.

Specific research on improvisational theater (improv) is just beginning. The following action research studies asked if improv could increase the length of a student's writing, thus developing writing fluency; and the results suggest that it does. The subsequent review of literature following the study sought to explain how improv influenced those results. Does improv provide a framework that takes students rapidly through essential literacy processes usually seen on the emergent level? If so, does this exposure and opportunity to practice these processes address deficits in social emotional and literacy skills essential to writing? With the writing level of students largely remaining below proficiency levels, an interdisciplinary understanding of how improv specifically helps to engage or reengage students in the process of writing is needed.

## **Study 1**

### ***Methodology***

The quasi-experimental comparison study took place at an inner city high school in New Jersey during a six week, extended year, summer program. School was in session Monday through Thursday. The study consisted of one experimental class and two comparison classes. Improv games would be taught to one class by myself, a certified social studies teacher and professional improv actor, and a substitute teacher, who was pursuing teacher certification. I did not have any prior relationship with the students I taught, as I was not a teacher in that district the preceding school year; and nor would I have any future relationship with them, as I was not teaching in that district. Students in the experimental class were told only that they would be learning improv games. They were not told that they might be participating in activities that would help their writing. The two comparison groups attended class focused on writing taught by a certified Special Needs Language Arts Instructor and a music instructor.

Over the six weeks, students would have 9 ½ hours of instructional time participating in short-form improv games. Other instructional time included ice-breakers and field trips. Improv games included “Yes, and...” games, Freeze Tag games, Story-Telling games and Story-Writing games.

### *Story-telling Games*

Prior to playing the one word at a time story-telling games, students were introduced to a simple story structure commonly used in improv: establish CROW (character, relationship, objective & where), create a problem and solve it. In pairs, students then practiced two variations of the one word at a time improv story-telling game with strict adherence to story structure and the rule of “Yes, and...” Students were then introduced to two more complex variations where they participated in larger groups of various sizes and made longer offers. These games were also framed by genre/story style such as fairytale, action adventure or science fiction. Students were introduced to types of genres through class discussion before being asked to apply it in the games. Students were coached during all story games to follow story-structure and adhere to “Yes, and...” on each offer.

### *Writing Activities*

The oral story games were followed by collaborative improv story-writing games that followed a mostly identical format, including use of the story structure and the concept of “Yes, and...” During the improv writing games, students sat in pairs or groups, depending upon the structure of the corresponding game. As in the oral story-telling game, the class acted as the audience, giving the initial offer that began a story. Following the format of the one word story-telling game, but writing it instead of speaking it, students offered one word at a time, passing their stories back and forth to their partner(s) as they finish each word. Following the simple story structure taught during the games, students ended the stories within five minutes. In the story games where students made longer offers and collaborated in larger groups, the duration of the writing games were approximately ten minutes. Instead of students randomly giving their offers during the story as would occur in oral story-telling games, students passed their papers or notebooks in a pattern either back and forth when in pairs or clockwise or counter clockwise when in larger groups. Similar to the oral version, the teacher instructed them to pass their papers throughout the game, giving differing amounts of time to write within each turn. As in the story-telling games, the teacher directed the student to move towards an ending and eventually gave implicit direction to end the story. Students wrote an ending to whichever story they were currently writing. The final activity was individual story-writing, whereby students followed the structure of the improv game, including audience offers, but composed individually rather than collaboratively.

### *Groupings*

Students were assigned a schedule of classes upon entering the program. All students attended either the improv class, or the writing classes from 9:05 to 10:00 am. Classes consisted of comparable student populations based on educational need, test scores, gender and race or ethnic background. All students had just finished their 9<sup>th</sup> grade year, were fluent in English, qualified for free or reduced lunch and were ethnically and racially diverse. An experimental group was chosen based on the availability of the instructor, who also taught an improv and career skills class. Two other classes served as comparison groups. Students had not received any improv training in the school year prior to their participation in this summer program.

### *Experimental Group*

The experimental group originally consisted of 18 students, but four were dropped from the evaluation due to one or more absences on the evaluation days, resulting in a total of 14 students; 7 males and 7 females. Seven of the students, 4 females and 2 males, were classified “special needs” and 7 were classified as “regular education.” One student who received 504 services was counted as a “special needs” student for this study.<sup>1</sup>

Based on the 2003 spring results of the Test of Achievement and Proficiency (TAP), grade level writing proficiency was determined to be 3.4-6.9, with an average grade level of fourth. This average was missing the score of one student. The proficiency range for regular education students was grade level 8.7-13.7, with an average grade level of 10.5

### *Comparison Group*

The initial comparison group included 42 students, in two classes. Ten of these students were dropped from the evaluation due to failure to attend the summer program, erroneous inclusion on the roster, or absenteeism on one or both of the evaluation days. The control group assessed consisted of 28 students, 15 females and 13 males. Seven females and 8 males were classified as “special needs.” One of the students included in the special needs group received 504 services. Thirteen were classified as “regular education.” Based upon the 2003 spring results of the TAP test, the grade level range for special needs students was 4.1-8.7, with an average of 5.9. The regular education students showed a grade level range of 7.5-14.4, with an

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<sup>1</sup> Section 504 of the Individuals with Disabilities Education Act (IDEA) contains a broader definition of disability, therefore students who may not meet the criteria for special education services with an Individual Education Plan (IEP), might still receive a 504 Plan, providing services and changes to the learning environment to meet their needs. Under section 504, a student’s disability may include learning and attention disabilities that interferes with a child’s ability to learn in a general education classroom.

average grade level of 11. Five of the 28 students, involved in the assessment, did not have TAP scores available.

*Assessment*

Every day between 12:45 and 1:15 both the experimental group and the comparison groups met in a large classroom with the Special Needs Language Arts instructor. Students wrote for 15 minutes, based on a writing prompt provided by the teacher. This was the same instructor who taught writing to the comparison groups. I was not present during this time. The first assessment was taken from student journals on the first day of the second week. The post assessment was taken, from student journals, on the second to last day of the summer program.

*Data Collection and Results*

The number of words and sentences or complete thoughts written in the journal entries, which served as pre- and post-assessments, were counted and recorded for each student participating in the program. Because writing skills of some students were low, complete thoughts were accepted even if they lacked appropriate punctuation and capitalization. The change in both word and sentence usage was recorded numerically and as a percentage for each student. The average and percentage of change in both word and sentence usage for the experimental and comparison group, with subsections of regular education students and students with special needs classification were calculated and recorded (see tables 1, 2, and 3).

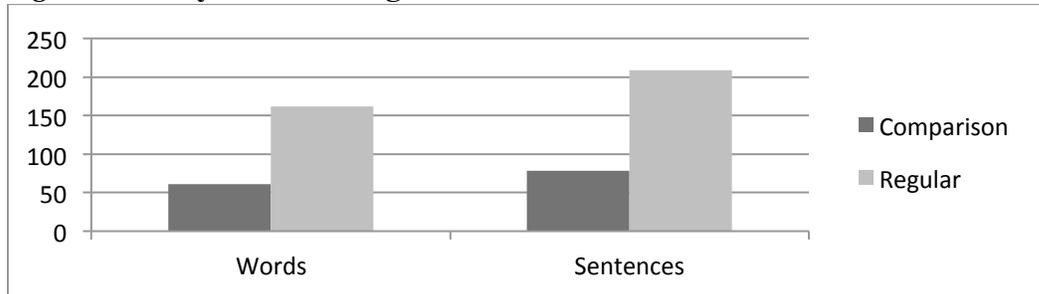
*Total Program.* Results indicated that the experimental group demonstrated a 101% increase in word usage and a 131% increase in sentence usage over the comparison group (see figure 1). The experimental group also showed a clear increase of almost 50% points of sentence usage over word usage. Although the comparison group also showed a growth in sentence over word usage, the two were only separated by 17% points.

**Table 1.**  
**Study 1: Total Program**

	Pre-Journal		Post Journal		Avg. Inc.		Avg. % Inc		% Inc over Control Group
	Word	Sent.	Word	Sent.	Word	Sent.	Word	Sent.	
Comparison Group	34.5	3.7	55.5	6.6	21	2.9	61%	78%	

Experimental	30.7	3.3	80.5	10.2	49.8	6.9	162%	209%	<b>101%</b>	<b>131%</b>
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**Figure 1. Study 1: Total Program-Percent Increase**



*Regular Education Students.* The regular education students, in the experimental group, showed a 52% increase in word usage and a 32% increase in sentence usage over the comparison group. Both the experimental and the comparison groups showed growth in the sentence usage over their word usage (see figure 2).

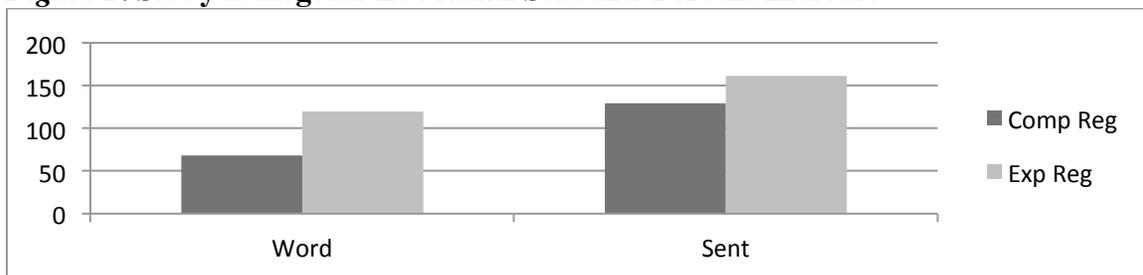
**Table 2.**

**Study 1: Regular Education Students**

	Pre-Journal		Post Journal		Avg. Inc.		Avg. % Inc		% Inc over Control Group	
	Word	Sent.	Word	Sent.	Word	Sent.	Word	Sent.	Word	Sent.
Comparison Group	35.1	3.1	58.8	7.1	23.7	4	68%	129%		
Experimental	34.7	3.4	76.4	8.9	41.8	5.5	120%	161%	<b>52%</b>	<b>32%</b>

Note: One student in the experimental group showed no improvement in sentences. In the Comparison group, one student decreased in both areas. All other students showed an increase in word and sentence usage.

**Figure 2. Study 1: Regular Education Students-Percent Increase**



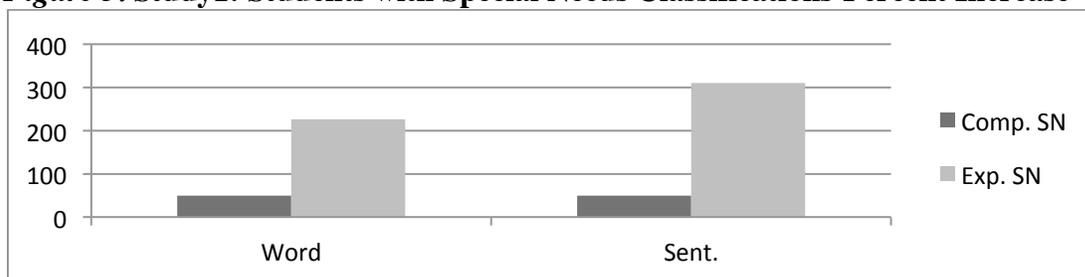
*Students with special needs.* The students with Special Needs or 504 classifications in the experimental group showed a 177% increase in word usage and a 261% increase in sentence usage over the comparison group. The experimental group’s increase in sentence usage dominated their increase in word usage by 87% points. The comparison group showed even growth of the word and sentence usage (see figure 3).

**Table 3.**  
**Study 1: Students with Special Needs Classifications**

	Pre-Journal		Post Journal		Avg. Inc.		Avg. % Inc		% Inc over Control group	
	Word	Sent.	Word	Sent	Word	Sent.	Word	Sent.	Word	Sent.
Comparison Group	36.1	4.3	54.1	6.4	18.1	2.1	50%	49%		
Experimental	26.7	2.8	87.2	11.5	60.5	8.7	227%	310%	<b>177%</b>	<b>261%</b>

*Note:* All students in the experimental group increased in both words and sentences, except for one student who remained the same in both. In the Comparison group one student showed no improvement in words and three students decreased in both areas. All other students showed an increase in word and sentence usage.

**Figure 3. Study1: Students with Special Needs Classifications-Percent Increase**



## Study 2

### Methodology

The second study was a quasi-experimental interrupted time series design, conducted at a New Jersey suburban high school in two History classes, in which I was the classroom teacher. The study occurred as part of a 9<sup>th</sup> grade World History class and a 10<sup>th</sup> grade American Survey class, between September 13 and December 22, 2004. A pre-assessment phase occurred from September through November, during which students engaged in regular class work. Instructional strategies included music, movement and ball-toss type theater

games. A sequence of improv games was introduced, over an 8 day period in December, including the concept of “Yes, and...” Students were told that they would learn improv games, however, they were not told that playing the games would increase the length of their writing. Immediately following the 8 days, students engaged in three days of journal writing as a post assessment. No improv games were conducted or discussed on these days.

The implementation of the games occurred from December 8-17. Half-year block scheduling provided 80 minutes of instructional time per class period. Improv games and writing activities took place during the first 40 minutes of eight consecutive classes. The remaining 40 minutes followed the normal curriculum, for each given class. During the 40 minute improv sessions, students participated in short-form improv games including one “Yes, and...” game, and Story Telling Games. Each oral story game was followed by a collaborative improvisational story-writing game as described in Study 1. The final activity was individual story-writing, whereby students followed the structure of the oral improv game, including audience offers, but composed individually and not collaboratively.

### *Groupings*

*9<sup>th</sup> Grade History.* This experimental group originally consisted of 25, beginning 9<sup>th</sup> grade students. None of the students were classified as Special Needs. Ten of the 25 students were dropped from the evaluation due to excessive absences on assessment days. The 15 remaining students consisted of 9 female students and 6 male students. The racial/ethnic breakdown was as follows: 10 White, 2 Hispanic, 2 Asian, and 1 Middle Eastern. All students evaluated were fluent in English and were concurrently enrolled in a separate Language Arts class.

*10<sup>th</sup> Grade Survey (History).* This experimental group originally involved seven beginning 10<sup>th</sup> grade students. Two students were dropped from the evaluation because of absenteeism of two or more days during any of the assessment periods, resulting in total participation of 5 students. Of the 5 remaining students, 2 were females and 3 were males. Two were classified as “special needs”. The racial/ethnic breakdown was three White and two Hispanic students. All students were fluent in English and were concurrently enrolled in a Language Arts class.

### *Assessment*

Three journal entries from each student in the ninth grade class were collected in both September and December to determine a pre-intervention base line of growth. Three additional journal entries were collected on the Monday after the program ended. Journal collection was modified to two, in the 10<sup>th</sup> grade class, to accommodate attendance issues. As in the pre-assessment, students were told that the journal would be collected and reviewed, but not graded.

*Structure of Assessments*

Upon entering class on an assessment day, students were asked to clear their desks except for their notebook and a pen/pencil. Journal writing was a familiar class activity occurring on an occasional basis throughout the semester. There was no journal writing done in class during the implementation of the games. Students participated in a self-monitored, 10-minute writing exercise, based on a prompt. They were required to remain in the classroom for the duration of the writing exercise and could not complete additional work if they determined “they were done.” All assessment and non-assessment days utilized identical procedures. No discussion of writing prompts or improv concepts occurred prior to, or during assessments. Journal topics were general and carefully chosen to avoid high interest writing prompts to insure that improv techniques accounted for increased writing performance.

*Data Collection and Results*

To create a base line or a control period, assessments occurred over a nonconsecutive four-day period, starting September 13<sup>th</sup> and a consecutive three-day period in December. The nonconsecutive collection allowed flexibility to address common class disruptions occurring in the month of September. Collection of journals completed on the fourth day occurred only for students absent on one of the previous assessment days. Data for the post-intervention occurred on the Monday, after the completion of the games.

For each of the three assessment periods, an average of word usage and an average for sentence usage for each student was calculated and recorded, including the number of words written for each journal entry and the number of sentences or complete thoughts in each entry. Because the writing skills of some students were so low, complete thoughts were accepted even if they lacked appropriate punctuation and capitalization. Averages of each student’s assessment period were then averaged together to create a class average for that assessment period (see Table 4).

**Table 4.**  
**Study 2: Ninth Grade Pre & Post Assessment**

<b>Journal</b>	Sept.	Dec. 6,	Average.	% Inc.	Dec. 6,	Dec.	Average	% Inc.
<b>Entries</b>	13, 20, 21, 27*	7, 8	Increase	<b>Sept.</b> <b>13 –</b> <b>Dec. 8</b>	7, 8	20, 21, 22	Increase	<b>Dec. 8 -</b> <b>Dec.22</b>
<b>Words</b>	56.1	71.7	15.6	<b>28%</b>	71.7	96	24.3	<b>34%</b>
<b>Sentences</b>	5.2	5.9	.7	<b>13%</b>	5.9	8.9	3	<b>51%</b>

Note: \*Used only if student was absent on a preceding day.

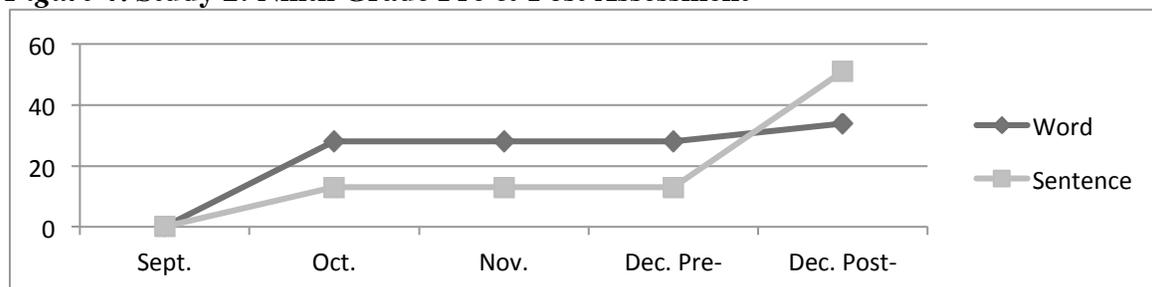
**Table 5.**  
**Study 2: Tenth Grade Pre & Post-Assessment**

<b>Journal Entries</b>	Sept. 13, 14	Dec. 6, 7,	Average Increase	<b>% Inc. Sept. 13 - Dec. 7</b>	Dec. 6, 7,	Dec. 21, 22	Average Increase	<b>% Inc Dec.6 – Dec. 22</b>
<b>Words</b>	61.2	60.6	5.3	<b>9%</b>	60.6	93.6	33.6	<b>55%</b>
<b>Sentences</b>	5.3	5.0	-.3	<b>-6%</b>	5.0	10.6	5.6	<b>112%</b>

Note: Although there were two additional September assessment dates, all students included in assessment were present during the first two days.

The 9<sup>th</sup> grade class demonstrated a 28% increase in word usage and a 13% increase in sentence usage over the course of an almost three month time period (see Figure 4). After only eight days of participation in the improv game sequence a 34% increase in word usage and a 51% increase in sentence usage was demonstrated. Prior to improv, the students' increase in writing length was driven more by word usage (28%) and not the addition of sentences (13%). After improv, the increase in the length of writing was driven by a strong increase in sentence usage (51%) over word usage (34%).

**Figure 4. Study 2: Ninth Grade Pre & Post Assessment**



The tenth grade class demonstrated a 9% increase in word usage and a decrease in sentence usage by -6% during the almost 3 month pre-assessment phase (see figure 5). After only eight days of participation in the improv sequence, a 55% increase in word usage and a 112% increase in sentence usage was recorded. Prior to improv, the students' increase in writing length was driven more by word usage (9%) and not the addition of sentences (-6%). After improv, the increase in the length of writing was driven by a strong increase in sentence usage (112%) over word usage (55%).

**Figure 5. Study 2: Tenth Grade Pre & Post-Assessment**

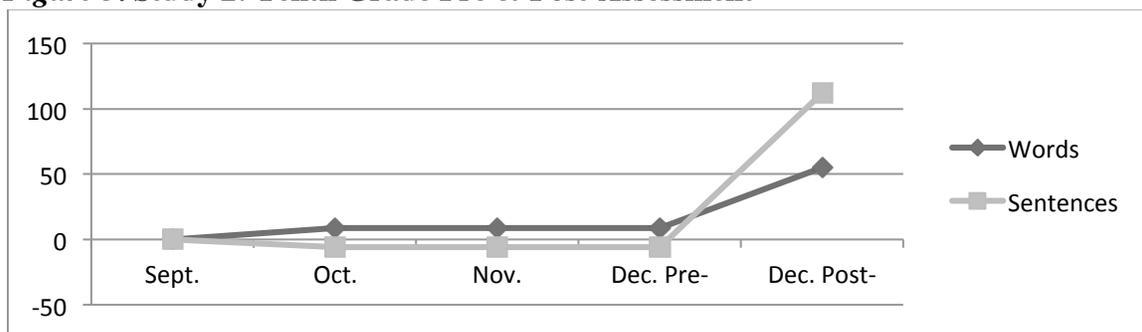
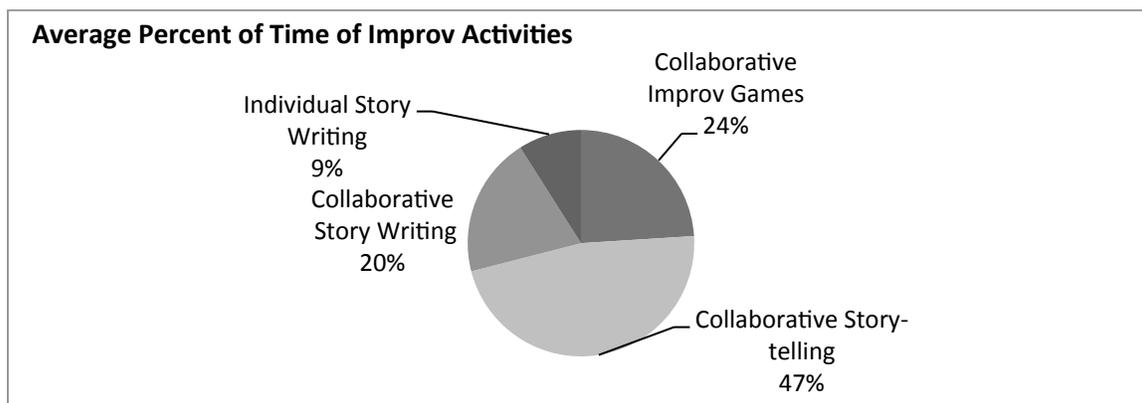


Table 6 and figure 6 present a comparative view of the time spent on the various improv activities during both studies. Although Study 1 consisted of 9 ½ hours of improv participation and Study 2 only included 3 hours of improv participation, the time spent on each type of activity were similar. The time dedicated to collaborative activities amounted to about 90% in both studies with only 6-13% dedicated to individual activities. Oral activities occurred during 65-70% of the time and only about 30-35% of the time was spent on writing.

**Table 6.**  
**Study 1& 2: Comparison of Time Spent on Activities**

Study 1	Time Spent	% of Time Spent	Study 2	Time Spent	% of Time Spent
Collaborative Improv Games (not story-telling)	2:20	25%		:40	22%
Collaborative Improv Story-Telling Games	4:10	44%		:90	50%
Collaborative Improv Story-Writing Games	1:50	19%		:40	22%
Individual Improv Writing Activities	1:10	12%		:10	6%

**Figure 6.**

Consistent with Podlozny's (2000) findings that drama instruction between 317 and 720 minutes showed greater effect than longer exposure, both studies showed strong and positive effects in a relatively short period of time. Students received only 570 minutes of instruction in Study 1 and 180 minutes in Study 2. It is not known if longer exposure to improv games would continue to produce growth in the area of writing fluency. This finding does however support improv's potential as an effective intervention that can produce clear results within a short period of time.

Also consistent with Podlozny's (2000) findings on transference, both male and female students showed clear increases, however in all categories, female students showed greater improvement than male students in both studies. This gender gap, although based on a sample too small to draw firm conclusions, is supported by recent scores on the National Assessment of Education Progress (NAEP), better known as the Nation's Report Card: Writing (2011). The test scores showed that female students, in 8<sup>th</sup> and 12<sup>th</sup> grade, write at higher proficiency levels than their male counterparts. Krache (2012) reports that education analyst Susan Pimente believes this difference may be explained by the test's survey in which 53% of girls agreed or strongly agreed that "writing is one of my favorite activities", but only 35% of the boys felt that way (para. 10). While both boys and girls wrote comparable collaborative and individual stories, the girls may have transferred skills gained to individual journal writing with greater ease than the boys due to a more favorable perception of writing. Perhaps future implementation of the program should include multiple opportunities to participate in the collaborative and individual story-writing sequence, with journal writing assessments following on a regular basis to better strengthen the transference of skills to other writing assignments.

### **Key Findings and Discussion**

Data analysis suggests that participation in the series of improv games increased students' writing fluency. With differences in setting, implementation schedule, population, and experimental design, the two action research studies showed positive growth, with greater growth occurring with more exposure over a longer period of time. I acted as both teacher and facilitator of improv games in both studies, however my relationship with the students, as well as my role during the facilitation of assessments, differed. Although additional research involving facilitators other than myself is needed, the relationship and role differences, as well as the structural and design differences strengthens the validity of the findings.

A sizable experimental population further fortified results between studies. A total of 50 students, across two studies, participated in the sequence of improv games, however due to absenteeism on assessment days; only 34 students were evaluated. Seeking to increase the accuracy of the pre and post assessments, the number of journal entries required was raised in the second study. This resulted in a greater loss of subjects in the second study. When using daily journal entries, group entries produced during a longer period would likely be more productive than entries made only on assessment days. Scheduling restraints in both studies did not allow for additional assessment to determine if writing fluency increases were sustained over time.

Data analysis presented four key findings that require further explanation, discussion and exploration. They are as follows:

### ***Increase in Sentence Over Word Usage***

In the pre-assessment phases, of both studies, word usage exceeded sentence usage in both regular education and special education/lower performing populations, as shown in Tables 1-5 and Figures 1-5. After exposure to the series of improv games, the growth in sentence usage exceeded the growth in word usage. This data suggests that the improv concept, "Yes, and..." did help students increase the length of their writing by helping them add consecutive thoughts. This data presents the strongest evidence supporting the internalization of "Yes, and..." and its use as a student writing prompt. Prior to improv exposure, students may have had an existing deficit in their ability to internalize thinking in a way that would enable them to fluently connect their thoughts when writing. Some students may also have interpreted prior Language Arts instruction, focusing on adding descriptors and modifiers, as the only means in which to make their writing "longer." Regardless of the possible reasons for word usage dominance prior to improv, it seems apparent that exposure to "Yes and..." enabled students to grow the length of their writing through complete thoughts and sentences instead of individual words.

***Collaboration Structured by “Yes, and...” Plays a Role***

With approximately 90% of instructional time, as shown in Table 6 and Figure 6, dedicated to collaborative activities, and only between 6%-13% of the time given to individual writing, it appears that collaboration, supported by the rule “Yes, and...” played a significant role in the increase of writing fluency. Throughout school, writing is a skill that students will almost always be asked to do in isolation. With only 6-13% of the time dedicated to individual writing, data suggests that students were immediately able to transfer what they had practiced collaboratively to their individual journal entries. This collaborative nature of improv, with its democratic structure where authority and responsibility are shared and the contributions of group members acknowledged (Panitz, 1996), may improve the learning environment and develop essential social emotional skills that can improve performance.

Improv’s collaborative nature encourages the development of confidence and self-esteem. When participating in collaborative improv activities, the “Yes and...” structure allows students practice with each turn. By continuously practicing to accept another’s idea and give their own, without fear of rejection they learn to trust not only their classmates but themselves as well. Trusting and accepting the ideas of peers they have never even spoken to before, or had shown any respect for, can be transformative on the classroom environment as a whole, as well as for individual students. With any previously felt stress or anxiety diminished or eradicated through collaboration, students enter a better emotional state to learn and engage.

In the collaborative relationship guided by “Yes, and...” students continually work through any desire to be defensive critical, judgmental or simply negating when accepting and giving offers. Perhaps when the students had the opportunity to write by themselves, they found a level of trust, acceptance, value and confidence, in their own ideas, that they had not felt before. Thus, students discovered an assurance that when they continued to add their own ideas, one after another, those ideas would be acceptable to themselves and also the instructor.

***Collaborative Oral Narratives Structured by “Yes, and...” Plays a Role***

With 70% of the time dedicated to the playing of oral improv games, the data suggests that these games play a key role in the development of writing fluency. The benefits of oral improv games may rest in both their social, interactional, and collaborative nature framed by “Yes, and...” and by the structure of the story-telling games, in which the students act as narrators. First, participation in the collaborative dialogues and narratives structured by “Yes, and...” may foster the development of an internal dialogue that facilitates writing fluency. During the game sequence, the students first practiced “Yes, and...” by saying it out loud before each offer as they created collaborative dialogues. Then during the story-telling games they internally thought, “Yes, and...” before each offer, creating collaborative narratives. Later

the internalized prompt of “Yes, and...” was applied during collaborative and individual narrative writing. Data analysis of the journal entries suggests that “Yes, and...” became an internalized prompt used during writing. Secondly, through their repetitive role as narrator, students transitioned from speaking to fellow students, and an actual audience, to acquiring a sense or an awareness of audience when writing. If this sense of audience helped to foster intention and purpose, then that may have resulted in an increase in writing.

### ***Students with Special Needs & Lower Performing Students Demonstrated Gains***

Data from both studies indicates that students with special needs and lower performance experienced dynamic growth in the amount of text they produced in their journal writing. Exactly why improv affected this group in such a manner is not clear, as individual students may have made gains due to the strengthening of different social emotional or literacy skills. For some students, a more positive and supportive classroom environment, as well as the growth in self-confidence and trust may have played a role. In addition, the statistically impressive growth in sentence usage, as compared to the regular education population in Study 1 and the 9<sup>th</sup> grade class in Study 2, suggests that these students strongly benefited from the use of “Yes, and...” as an internal prompt. Whether participation in this series of improv games addressed social emotional or literacy skills, data suggests that improv helped these students increase their writing fluency in a relatively short period of time.

### **Conclusion**

After participation in the sequence of improv games students showed an increase in their writing fluency. These findings, along with existing literacy research, suggests that improv provided a framework that takes students rapidly through essential literacy processes seen on the emergent level; and that exposure to, and practice of, these processes address deficits in social emotional or literacy skills that are important to writing. The sequence of games used in these studies scaffolded not only improv structures, but also served to scaffold essential literacy skills that enable students to move from collaborative speech to individual writing.

A student’s reluctance to write may be due to social-emotional reasons or literacy based deficits. With individual reasons usually not known to the teacher, improv could serve as an effective broad based instructional intervention. If reluctance to write is due to disengagement in either a given class or school entirely, the structure as well as the social, collaborative and multi-modal nature of improv may reengage, motivate and deepen their learning experience. If a student’s resistance is due to a lack of confidence in their ability or sense of worth in their own work or thoughts, then improv’s collaborative nature supported by the rule “Yes, and...” helps by quieting self-criticism, and promoting self-expression, while creating a supportive learning environment which also in turn helps the individual develop the confidence and self-

esteem needed to put their own thought down on paper. For those students who never figured out how to transfer their oral fluency to writing, then “Yes, and...” serves as an internal prompt aiding in that transition, while the games provide a sense of audience as well as the opportunity to practice the transitioning from collaborative speech to individual writing through the development of narratives.

This relationship between improv’s ability to develop writing and other specific literacy skills in a quantifiable way invites further study. As students continue to fail to write at proficient levels, improv may serve as an impactful intervention that can yield quantifiable results in a relatively short period of time. Reading fluency and comprehension is another possible exploration given that collaborative writing games invited students to repetitively reread each story: reading, scanning, visualizing, and making contextual and syntactic choices. With existing research (Bidwell, 1990; McMaster, 1998; Smith & McKnight, 2009; Wilhelm, 2007) indicating the importance of these skills in the development of reading fluency and comprehension; research regarding improv’s ability to demonstrate growth in these areas would greatly benefit students, teachers, and improv. By gaining a greater understanding and appreciation of how and why improv effectively and efficiently develops certain skills, educators will be more inclined to integrate them into classroom instruction, facilitate them with respect to their rules and structures, and consequently understand improv as a quantifiable instructional intervention.

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### **About the Author**

Mary DeMichele is an educator with over 20 years of experience as a certified teacher, actor, trainer and consultant. She has taught and advocated for students of economically,

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