

## **Increasing English Learners' Positive Emotional Response to Learning Through Dance**

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### **Abstract**

This study investigates dance as an English Second Language (ESL) curriculum enhancement. The curriculum utilizes kinesthetic learning, which is a method seldom incorporated in formal academic classrooms (Pourhosein Gilakjani, 2011) despite evidence suggesting that it benefits all students, including those without kinesthetic learning preferences (Schumann, 1997). Supporters believe that the benefits of incorporating movement in the classroom include increased student enjoyment, motivation, and confidence in learning. However, these beliefs are merely anecdotal at present. This study analyzes quantitative questionnaires and qualitative feedback from 26 students who participated in a 4-week long Dance ESL curriculum to determine whether dance-based learning can boost students' positive emotional responses to learning. We conclude that movement may have some merit as a curricular supplement by increasing positive emotional responses and vocabulary retention in an ESL setting.

**Keywords:** enjoyment, flow state, intrinsic motivation, anxiety, kinesthetic learning, English Second Language, English Foreign Language, dance, vocabulary learning, vocabulary retention

### **Introduction**

Student motivation and anxiety can be strong indicators of a student's overall academic success (Chamot & Kupper, 1989; Cohen, 1993; Pourhosein Gilakjani, 2011). Intrinsic motivation in particular can encourage students to persevere (Rockafellow & Saules, 2006) while anxiety can shut learning down (Mori & Mori, 2011). English language teachers have been interested for years in increasing motivation and reducing classroom anxiety and have recently adopted digital game-based ap-

proaches (e.g., Brom, Šisler, Slussareff, Selmbacherová, & Hlávka, 2016) and multimedia learning techniques (e.g., van der Meij, 2013) in an effort to do so.

While many curricular innovations seem to cater to aural and visual learners, relatively few innovations target kinesthetic learners (Chamot & Kupper, 1989; Cohen, 1993; Haley, 2004; Pourhosein Gilakjani, 2011). This may be in part due to legitimate classroom constraints or possibly to an association with Total Physical Response (TPR) methods popularized in the 1970s and now overlooked because of weak theoretical underpinnings. Nevertheless, theories of movement suggest mental processes can be aided by learning through experience (Moreno, 2005). Moreover, implementing kinesthetic learning methods in addition to typical visual and auditory methods in the ESL classroom can boost student enjoyment and motivation while decreasing anxiety, which can ultimately lead to greater student accomplishment in English (Schumann, 1997).

Dance in particular may serve as a useful kinesthetic tool in English language teaching because of its broad appeal and relatively easy access. Dance has proven benefits such as increasing happiness and reducing stress due to increased endorphins (Richards et al., 2015) as well as preparing student's brains for learning by increasing blood circulation to oxygen-absorbing brain cells (Bell, 1999). Recently, dance has been used in some programs to augment typical academic classes in an effort to incorporate more kinesthetic learning. However, the benefits of dance in an academic classroom are merely anecdotal at this point. Although teachers of dance-enriched academic curricula report improvements of student confidence and engagement (Bell, 1999; "A Body in Motion," 2015; Hill, 2015; "Moving and Grooving to the Beat of Math," 2016), the influence of dance-enriched learning on student attitudes has not been empirically researched. This small-scale, localized study introduces dance as an enhancement in an English as a Second Language (ESL) curriculum that utilizes the benefits of kinesthetic learning to increase student enjoyment, motivation, and confidence in learning.

### Literature Review

Intrinsic motivation can help students succeed academically and achieve greater mastery of the English language. Gardner and Yung (2015) define motivation as "a combination of effort, desire and attitude relating to learning the target language" (p. 159). Self-determination theory distinguishes between two forms of

motivation: extrinsic motivation—working towards a goal in order to reach a reward—and intrinsic motivation—working towards a goal for the self-satisfaction and enjoyment of having done so (Deci & Ryan, 1985). Studies have shown that students who are intrinsically motivated are more likely to persevere in the midst of academic challenges than those who are motivated extrinsically (Amabile, 1982; Boyd, 2002; Rockafellow & Saules, 2006). Zhang, Lin, Zhang, and Choi (2017), for example, indicate that student motivation positively correlates with the number of vocabulary words English Language Learners (ELLs) successfully learn. Thus, researchers tend to agree that increased intrinsic motivation leads to increased academic success (Cup Choy, 1977; Lens & Vansteenkiste, 2012; Könings, Brand-Gruwel, & van Merriënboer, 2011; Zimmerman, 2008).

Student motivation has been shown to correlate with learning enjoyment, which can likewise help students succeed in language courses. Research shows that motivation is correlated with positive emotions as opposed to negative ones (MacIntyre & Vincze, 2017), and for this reason, researchers hold that enjoyment is closely tied to motivation (Hong, Hwang, Tai, & Lin, 2017). Enjoyment of learning is explained by flow, a theory proposed by Csikszentmihalyi (1975). According to this theory, flow is the state of pleasant absorption in an activity when a student is focused “on the object of the activity rather than on an achievement outcome” (Brom et al., 2017, p. 239). Pearce, Ainley, and Howard (2005) indicate that students move in and out of flow state during a typical lesson, but flow state often occurs when students are immersed in an activity. This state of enjoyment, or flow, is preferential for students because it has been shown to relate to immediate learning gains as well as long-term knowledge retention (Brom et al., 2017; Mega, Ronconi, & De Beni, 2014; Pekrun et al., 2002). For example, Mega, Ronconi, and De Beni (2014) have shown that of 5,805 undergraduate students in Italy, those who enjoyed their classes passed more exams and had higher final GPAs at the end of their program. Furthermore, studies suggest that student enjoyment combined with intrinsic motivation predicts even greater academic success (Hong, Hwang, Tai, & Lin, 2017). Taylan’s (2017) research in EFL classes in Turkey, for instance, reports that enjoyment of class increases student motivation, leading to higher grades and overall accomplishment.

Classroom anxiety can mitigate academic success. Countless language learners struggle with anxiety in the language classroom (E. K. Horwitz, Horwitz, & Cope,

1986; Phillips, 1992), which has been shown to inhibit the learning process and slow down learning (Arnold & Brown 1999; Mori & Mori, 2011). However, overcoming this anxiety along with increasing motivation and enjoyment can lead to greater academic success. For example, MacIntyre and Gardner (1994) indicate that anxiety during a specific stage of a second language communication task directly inhibits the student's ability to perform that task well. Because positive emotions in a learning situation are thought to positively correlate with a student's capacity to succeed (Lin, Chao, & Huang, 2015), changing the affective state in class by decreasing anxiety and increasing motivation and enjoyment can better enable students to achieve highly (Du, 2009; Mori & Mori 2011). As courses incorporate interesting activities that boost student motivation and enjoyment, student confidence in learning can increase as well (Haciomeroglu, 2017; Sanadgol, 2015).

Teachers can capitalize on student motivation, enjoyment, and confidence by designing engaging activities to aid students in achieving their language goals. Despite an instructor's best intentions, however, student motivation and enjoyment tend to decline over the course of a semester or year (Gottfried, Nylund-Gibson, Gottfried, Morovati, & Gonzalez, 2017; Busse & Walter, 2013; Wigfield, Tonks, & Klaua, 2009). Some teachers have designed curriculum enhancements, or emotional design techniques (Brom et al., 2017; see also Um, Plass, Hayward, & Homer, 2012), to help counteract their students' potential motivational decline. These techniques employ creative methods of manipulating content into more interactive forms such as digital game-based (e.g., Brom, Šisler, Slussareff, Selmbacherová, & Hlávka, 2016) and multimedia learning (e.g., van der Meij, 2013). These alternate teaching platforms, among others, serve to increase students' positive emotional responses, which in turn increase flow, motivation and confidence, which can lead to greater academic accomplishment.

Kinesthetic learning, or learning through movement, is another emotional design method that could be an effective technique to increase enjoyment, motivation, and confidence in language learners. A method that gained brief popularity in the 1970s called Total Physical Response (TPR) was among the first explorations of kinesthetic learning in ESL instruction. This method incorporated simple movements in the language classroom (Asher, 1966). It built on synaptic trace theory of memory, which states that information is more easily recalled when it can be traced back to physical action (Poo et al., 2016). TPR has since fallen out of use

and subsequently maligned because it is limited in scope of application and lacks clear methodology and empirical validation; though, recent research has emerged that supports the benefits of kinesthetic learning (though not TPR specifically).

Moreno's Cognitive-Affective Theory of Learning from Media (CATLM) holds that in order to retain information in long-term memory, a student must process new information through the senses as well as organize that information in visual models through experience (Moreno, 2005; see also Weinstein & Park, 2014). Students organize information differently, depending on which learning style resonates with their experience most. MacKeracher (2004, pp.71) explained that learning styles are "the characteristic of cognitive, affective, social, and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment." Thus, incorporating many learning styles into a classroom setting enables students to organize information through experience (Brown, 2000; Haley, 2004; Pourhosein Gilakjani, 2011), which in turn leads to increased information retention (Moreno, 2005) and other benefits. Kinesthetic learning combined with typical visual and auditory teaching methods can also boost student motivation and lead to greater student enjoyment (Pourhosein Gilakjani, 2011) by providing personalized kinesthetic learning experiences that benefit a wide range of students, including those who may not have kinesthetic learning preferences (Schumann, 1997).

Despite its benefits, kinesthetic approaches are often overlooked in curriculum design, while visual and auditory styles are incorporated more often (Chamot & Kupper, 1989; Cohen, 1993; Haley, 2004; Pourhosein Gilakjani, 2011). The widely used and accepted teaching approach in ESL, communicative competence teaching, is likewise dominated by visual and auditory methods, while kinesthetic teaching methods are typically limited to role plays (Even, 2008). Thus, it may be possible for ESL teachers to incorporate more elements of kinesthetic learning, including dance, into their classroom in order to help increase student flow, motivation, and confidence.

Although dance has occasionally been used as a teaching method to augment typical academic classes, no systematic studies have investigated its impact on student attitude in the ESL classroom. One course established by an English Foreign Language (EFL) teacher in Japan incorporated dance and rhyming games into an English teaching curriculum for adult students (Bell, 1999). The results showed

rising confidence levels as students grew to enjoy participating in dancing and singing activities. However, the study was based merely on one instructor's observations rather than on systematic quantitative or qualitative data collection. Similarly, a program called Kinnect uses dance to teach science concepts such as photosynthesis and rock formation to elementary school students (Hill, 2015), and a comparable program uses dance to teach math at a junior high school ("Moving and Grooving to the Beat of Math," 2016). Teachers claim these classes help students "learn better" (Hill, 2015) by boosting student motivation, engagement, and enjoyment, but no empirical study has validated these claims.

Although teachers of these courses agree that dance-augmented academic curriculum has myriad benefits, evidence to support the gratification and motivational benefits of dance-based learning is merely anecdotal at this point. Additional research, including empirical investigations that link student self-reports with dance interventions are needed to determine whether dance-based learning can indeed increase student enjoyment, motivation, or confidence in learning English as a second language. As such, we conducted a local and small-scale study to determine student self-reports of a supplemental, 4-week dance-based English curriculum. Our aim in conducting this study was to determine whether students found the dance curriculum beneficial in its own right and whether they reported any change in their enjoyment, motivation, or confidence in English language learning due to their participation in a dance-based curriculum.

## Method

### Participants

We conducted this course at the English language lab school associated with a large accredited university. This language school has seven levels, ranging from novice learners in Level 1 through low-advanced learners in level 7, and we invited students in level 4 and above to participate in the dance curriculum. This is because proficient English learners would benefit most from this course's academic focus, as much of the curriculum involves higher-level vocabulary and complex sentence formation.

Of all 49 students who attended the class at some point, we received the necessary consent forms and questionnaires from 26 students. The distribution of participants across levels was relatively even, with about 5 participants from levels

4, 5, and 6. There were 8 students from level 7 who attended, and a few students from level 3 (3 students) also participated. These students were ages 19-37, with 57% of them being in their early 20's. 18 participants were from Latin American countries, 5 came from Asian countries, and the remaining 3 came from other countries including Haiti, Algeria, and Poland. The representation of males and females enrolled was close to even, with 58% of participants female and the remaining 42% male. 16 of these students had been in the U.S. for less than 6 months, while the other 9 students had been in the country between one and two years.

### Materials

We created a 4-week Dance ESL curriculum to implement with these students. This curriculum incorporated formal pedagogical practices of effective ESL teaching in a beginning contemporary dance class format. The curriculum focused on learning vocabulary words in preparation for the TOEFL.

Classes met for 50 minutes on Mondays and Wednesdays for four weeks, a total of about six and a half hours. Mondays concentrated on learning new words and dance techniques while Wednesdays concentrated on integrating new words with dance elements. The last week was a comprehensive review. Each class consisted of about 15 minutes of instruction, with the remaining 35 minutes dedicated to group work. A concise version of this Dance ESL curriculum is attached as the appendix, and a complete version is available upon request.

Students who chose to participate took a questionnaire before and after the course that assessed each participant's enjoyment, motivation, and confidence levels through validated evaluations Achievement Emotions Questionnaire (AEQ) (Pekrun, Goetz, & Perry, 2005) and Motivation Orientation of Language Teaching (MOLT) (Guilloteaux & Dörnyei, 2008). These questionnaires focused on students' experience in their regular academic courses that semester. See Figures 1-3 below for examples of questions concerning enjoyment, motivation, and confidence.

**When an English lesson ends, I often wish it could continue.**

Strongly  
Disagree

1

2

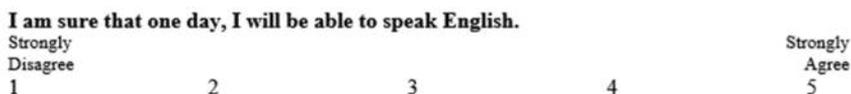
3

4

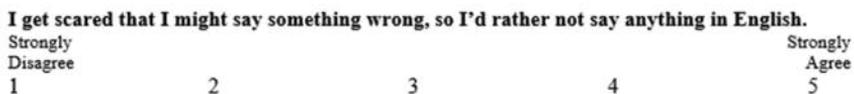
Strongly  
Agree

5

**Figure 1.** Example of enjoyment question



**Figure 2.** Example of motivation question



**Figure 3.** Example of confidence/anxiety question

The questionnaire also requested information about demographics including country of origin, countries of habitation, time spent in the U.S., time spent studying English inside and outside the U.S., gender, birthdate, native language, additional languages, and level of English proficiency (as demonstrated by the class enrolled in at the language school).

## Procedures

We recruited students by announcing the course in classes, posting fliers, and sending out email blasts. We informed students that the curriculum was meant to study the capacity of dance-based learning to aid in vocabulary retention, but they were not explicitly told about our intent to study their emotional responses to classwork. Students' incentive to participate was the intrinsic desire to dance, the potential to learn vocabulary in preparation for the TOEFL, and the refreshments provided at the end of each class. All students who attended class the first week took a pre-course questionnaire.

We took attendance at each class with the expectation that students would attrite. At the completion of the course, students were divided into three groups: Group A (those who attended 5-8 times), Group B (those who attended 3-4 times), and Group C (those who attended once or twice), which were compared against each other in analysis. 6 students were in Group A, 7 were in Group B, and 13 were in Group C.

Students in all groups took post-course questionnaires consisting of the same questions as the pre-course questionnaire. We also conducted focus groups and interviews (through personal interaction and email correspondence) to analyze the

results of this curriculum qualitatively. A total of 10 participants from Groups A and B contributed qualitative feedback.

### **Analysis**

Upon completion of the curriculum, we used pre- and post-course questionnaires to analyze the effect of the independent factor—number of Dance ESL classes attended—on the dependent factors— enjoyment, motivation, and confidence in their typical academic classes. We calculated averages of these dependent factors before and after the course for each of the attendance groups (A, B, and C) and used t-tests to determine whether the analysis was statistically significant.

To analyze qualitative data from focus groups and interviews, we used content analysis by coding and organizing thought groups then comparing positive responses to the negative ones.

## **Results and Discussion**

### **Numerical Data**

Quantitative data reveals information about the impact of attendance on self-reported scores. T tests indicated that none of the demographic information related had a significant impact on either the benefits students received from the curriculum or the students' likelihood of attending. This includes the student's level of language learning, country of origin, age, and time spent in the U.S. Most notably, these results show that gender did not significantly influence the effects of Dance ESL on student participation, showing that dance participation was not necessarily a gendered activity in this ESL course.

Statistical measures help us visualize the effect of attendance on enjoyment, motivation, and confidence. The average percent change in participants' self-reported scores of these factors are shown in Table 1 below. Positive numbers show an increase in self-reported scores during the course and negative numbers show a decrease in self-reported scores during that same timeframe. Although these percent changes by group are not statistically significant, we can see that self-reported scores in Group A and Group B, with 6 and 7 participants, respectfully, increase during the course, while Group C's scores, with 13 participants, decrease over the same timeframe.

**Table 1.** Changes in Self-reported Enjoyment, Motivation, and Confidence

	Attendance Group	n	Starting Mean and SD	Ending Mean and SD	Percent Mean Change
<b>Enjoyment</b>	A	6	4.3 (0.49)	4.5 (0.57)	+ 4.5%
	B	7	4.4 (0.52)	4.5 (0.38)	+ 2.0%
	C	13	4.3 (0.39)	4.2 (0.48)	- 0.5%
<b>Motivation</b>	A	6	4.3 (0.42)	4.4 (0.44)	+ 1.6%
	B	7	4.3 (0.42)	4.6 (0.36)	+ 7.1%
	C	13	4.4 (0.49)	4.3 (0.37)	- 1.6%
<b>Confidence</b>	A	6	3.3 (0.64)	3.4 (0.59)	+ 3.0%
	B	7	3.1 (0.97)	3.5 (1.11)	+ 12.9%
	C	12	3.6 (0.53)	3.4 (0.82)	- 5.5%

Attitude averages show a steady increase correlating with the amount of time spent in Dance ESL class. Enjoyment and motivation scores, on the other hand, contain a threshold at which these values do not increase between Group B (participants who came three to four times) and Group A (participants who came 5-8 times). From this data, we can infer that Dance ESL classes may increase positive emotional responses to learning including enjoyment, motivation, and confidence; however, these results do not carry forward in a linear relationship. The quantitative data illustrates that attending Dance ESL class about once a week may be just as effective at increasing positive emotional responses as attending Dance ESL classes about twice a week. However, more research with a larger subject sampling should be done to determine whether these conclusions are statistically significant.

### Student Comments

Qualitative results from a focus group, personal interviews, and email exchanges with 10 students from Groups A and B reveal more information about the benefits and limitations of this curriculum. As this course focused on boosting students' positive emotional responses and vocabulary retention, we will first examine remarks dealing with these topics.

Students agreed that Dance ESL classes helped increase their enjoyment, motivation, and confidence. Regarding enjoyment, many agreed that that the class made them excited about learning English. For example, one remarked, "I feel that the Dance and English classes made me more happy and excited about learning

English.” Another stated that she was excited about learning English specifically in the Dance ESL course: “I feel more excited because when I was in the class Dance and English, I couldn't wait until class finished to go there.” These quotes show that students enjoyed the Dance ESL classes but are inconclusive about whether the course helped boost their enjoyment of English in their typical academic courses as well.

Students also agreed that the responsibility of communicating with their groups throughout the course increased their motivation to learn English because they wanted to communicate more clearly and effectively. This is demonstrated by one student's remark, “Performing these tasks, I had many opportunities to learn English, as well as motivation to learn. Because I wanted to be a part of the team and also help my team, which means that I need to learn more English to express my thoughts freely in English.” Another stated, “When we danced with partners, we had to talk in English, so I wanted to learn English more.” The quotes demonstrate that group interaction encouraged them to work on their language skills.

Regarding confidence, some students mentioned that group work helped them overcome anxiety about communicating in English. Speaking about the tendency to form new groups each class period, one student said, “I had been worried about talking with new people in English. But through this class, I overcame that.” Another student showed that the positive outlook of errors we have in dance class carried over to their perspective of errors in English: “The teacher helped [us be] not ashamed [of] our errors, just be friendly and help each other in learning English, as well as just help to develop.” These remarks show that students increased in confidence both within Dance ESL classes and outside of that specific course.

The three elements discussed above—enjoyment, motivation, and confidence—were the elements of focus group and interview questions that received only positive feedback. Looking at the specific quotes discussed, we may infer that these positive responses were due in large part to the nature of the curriculum that required active communication in groups (see Bentley & Warwick, 2013).

Participants also reported that Dance ESL classes helped them learn content more effectively. This information is not reflected in the quantitative data because vocabulary retention was not measured, but it can be clearly seen in the content analysis. This analysis shows that the majority of students felt incorporating movement with English enabled them to learn vocabulary more effectively and that at-

tending regularly helped them retain that information. Some students remarked that although they could not remember all the words that were introduced, the slower pace and incorporation of movement helped them learn more than they normally would have. Segments of students' remarks about vocabulary retention along with the total number of positive and negative remarks are shown in Table 2 below.

**Table 2.** Student Comments on Vocabulary Retention

	Positive Remarks	Negative Remarks
<b>Vocabulary retention (13 positive 2 negative)</b>	<ul style="list-style-type: none"> <li>+ I think the part of it we need to think... with movement is how to demonstrate or create to show the meaning of the word that we need to perform. That helps me to memorize the word. It's easier that I can remember. It's a little hard to try to make the movement, but that work makes me so I can remember after.</li> <li>+ So if I say explosive *motion with hands* we know it, and that helps a lot to recall that word, at least for me.</li> <li>+ We learned more than the definition.</li> <li>+ I like it so much because we practice and work in the class, so I think it—I remember all the words.</li> <li>+ I think it's better because every week [in school] we have to learn 24 new words and you ask us to learn a few words, not too much.</li> </ul>	<ul style="list-style-type: none"> <li>- Well, I can't remember them all.</li> <li>- I don't remember them all.</li> </ul>

Participant remarks support the hypothesis that Dance ESL classes can increase positive emotional responses and help students learn and retain vocabulary.

Aside from the primary goals of this course, participants also reported that the Dance ESL classes were beneficial for their emotional and physical wellbeing. They reported that classes were enjoyable, helped them meet new friends, relieved stress, and made them happier. They reported that they liked participating in regular exercise and meeting new people. Participants also found that the nervousness they may have felt about dancing at the start of the course faded once in class. Most

participants remarked that they wished the class could continue. Segments of student remarks regarding wellbeing along with information about the number of positive and negative remarks for each component are shown in Table 3 below.

**Table 3.** Student Comments on Wellbeing

	<b>Positive Remarks</b>	<b>Negative Remarks</b>
<b>Enjoyment of class</b> (3 positive 0 negative)	+ This class helped me, because somewhat I feel more happy in class. + Yesterday I felt not good, and after dancing... 'Wohoo! I can do it!'	
<b>Social aspects of class</b> (5 positive 0 negative)	+ In this class, I made a lot of friends. + We have great company.	
<b>Stress relief in class</b> (6 positive 1 negative)	+ In my opinion, [this class] can help me to more relax. + Every time we have class or so much homework, I think it's better [to go to Dance and English class].	- [If we had a syllabus, there would be] more efficiency to learn, like for each week the day we're going to do something or some activity, and some people... will feel the pressure [without a syllabus].
<b>Exercise in class</b> (1 positive 0 negative)	+ [And we] have the physical exercise, right? So for the week for two hours for exercise it's good.	
<b>Confidence about dancing</b> (10 positive 1 negative)	+ This is the part that I like because... I don't know to dance, and my companion said 'go, go' and I said 'no, no I don't know how to dance' and I have that conflict, but when I came I liked it because "oh wow," I tried to do my best and I try to learn. + I think our class was very respectful, so I think I'm not a very good dancer, but I feel very comfortable.	- I think this is the reason people don't come: they're scared of dance or they feel not comfortable.
<b>Duration of course</b>	+ I don't want to finish.	
(3 positive 0 negative)	+ I wanted... more than a month. You should consider that if someone does it again.	

Many agreed that although this course had benefits, some steps can be taken to improve it further. They would like to focus on more structured communication activities as well as pronunciation practice, as many participants struggle with speaking and pronunciation the most. They recommended further strengthening the link between dance and English by incorporating speaking activities in nearly all facets of the class. They believe that the power of interpersonal connections and friendships should be harnessed to encourage others to move past their fears and try something new. Segments of students' suggestions for improvement are found in Table 4 below.

**Table 4.** Student Suggestions for Course Improvement

	<b>Suggestions for improvement</b>
<b>Structured practice</b>	<ul style="list-style-type: none"> <li>• So I don't know how can we practice a little more our speaking.</li> <li>• [I want to practice] vocabulary pronunciation.</li> </ul>
<b>More practice</b>	<ul style="list-style-type: none"> <li>• I think there's some we need to work on, like how to make the link stronger. Yeah so maybe, you can... put on a song and we need to say some word, or just [during] warm-up we can be saying the word or vocabulary or something. I just try to [encourage] the connection.</li> </ul>
<b>Involving more people</b>	<ul style="list-style-type: none"> <li>• My friends. Definitely it's friends [that help me feel comfortable dancing]... that's why I think next time there will be more people because we can speak about and tell friends to go for it.</li> </ul>

## Conclusion

Both quantitative and qualitative results agree that active participation in Dance ESL classes can lower overall anxiety, which in turn increases student confidence and motivation. However, these benefits may not be compounded as participation increases. Qualitative results additionally show that students may have learned vocabulary words and their uses more effectively by incorporating movement with academic material in accordance with synaptic trace theory of memory. Participants report that this course benefited their general wellbeing through exercising, relieving stress, increasing happiness, and forming friendships. These conclusions demonstrate that kinesthetic learning can have beneficial applications in the academic classroom that help both kinesthetic learners and others to learn and retain information.

### Future Research

Further research with a larger sample of participants can be done to determine the statistical significance of findings, and inclusion of a control group will enable researchers to determine whether students' attendance did have a notable effect on their enjoyment, motivation, and confidence. Also, since vocabulary retention was not quantitatively measured despite the curriculum's design to teach vocabulary, future research can include pre- and post- course tests that measure this aspect. Additional research may be done to resolve new questions that arose over the course of this study. For example, with a larger sampling of students, does the percent increase in motivation and confidence between Groups A and B have a linear relationship? Why or why not? Also, the confidence change in this study was much more drastic (3.0-12.9% change) than the changes in motivation and enjoyment (1.6-7.1% and 0.5-4.5% change, respectfully): Does this hold true when compared to a control group? Why or why not? Additionally, many students commented on the social aspects of class that helped increase their enjoyment, motivation, and confidence. Further studies can examine the effect of socialness on learning and the relationship between physical and emotional wellbeing and participation in the Dance ESL course.

### Implications

More studies should be done on a larger scale to determine the importance of kinesthetic learning in students' retention of material and emotional responses. However, this curriculum may continue to be offered at the language lab because of widespread student interest in it. Those who participated at least four times reported increases in enjoyment, motivation, and confidence, so continuing to offer the course may benefit students who choose to participate.

### References

- Amabile, T. M. (1982). Social psychology of creativity: A consensual assessment technique. *Journal of Personality and Social Psychology*, 43(5), 997. [https://doi.org/10.1007/978-1-4612-5533-8\\_3](https://doi.org/10.1007/978-1-4612-5533-8_3)
- Arnold, J., & Brown, H. D. (1999). A map of the terrain. *Affect in Language Learning*, 372, 1. <https://doi.org/10.4000/terrain.2713>

- Asher, J. (1966). The Learning strategy of the total physical response: A review. *The Modern Language Journal*, 50(2), 79–84. <https://doi.org/10.2307/323182>
- Bell, D. (1999). Rise, Sally, rise: Communicating through dance. *TESOL Journal*, 8(1), 27–31.
- Bentley, Y., & Warwick, S. (2013). An investigation into students' perceptions of group assignments. *Journal of Pedagogic Development*, 3(3), 11-19.
- A Body in Motion. (2015). Retrieved from <https://dancesciencefest.org/a-body-in-motion/>
- Boyd, F. B. (2002). Motivation to continue: Enhancing literacy learning for struggling readers and writers. *Reading & Writing Quarterly*, 18(3), 257–277. <https://doi.org/10.1080/07487630290061818>
- Brom, C., Šisler, V., Slussareff, M., Selmbacherová, T., & Hlávka, Z. (2016). You like it, you learn it: affectivity and learning in competitive social role play gaming. *International Journal of Computer-Supported Collaborative Learning*, 11(3), 313-348. <https://doi.org/10.1007/s11412-016-9237-3>
- Brom, C., Děchtěrenko, F., Frollová, N., Stárková, T., Bromová, E., & D’Mello, S. K. (2017). Enjoyment or involvement? Affective-motivational mediation during learning from a complex computerized simulation. *Computers & Education*, 114, 236–254. <https://doi.org/10.1016/j.compedu.2017.07.001>
- Brown, H. D. (2000). *Principles of Language Teaching and Learning*, (4th ed.). White Plains, NY: Longman.
- Busse, V., & Walter, C. (2013). Foreign language learning motivation in higher education: A longitudinal study of motivational changes and their causes. *The Modern Language Journal*, 97(2), 435–456. <https://doi.org/10.1111/j.1540-4781.2013.12004.x>
- Chamot, A. U., & Kupper, L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annals*, 22(1), 13–22. <https://doi.org/10.1111/j.1944-1989.tb03138.x>
- Cohen, A. D. (1993). Language learning: Insights for learners, teachers, and researchers. *TESOL Quarterly*, 27(1), 119–120. <https://doi.org/10.2307/3586956>
- Csikszentmihalyi, M. (1975). *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play*. San Francisco, CA: Jossey-Bass Inc.
- Cup Choy, E. (1977). But they’re not motivated. *TESL Reporter*, 1(1), 14-19.
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109–134. [https://doi.org/10.1016/0092-6566\(85\)90023-6](https://doi.org/10.1016/0092-6566(85)90023-6)

- Du, X. (2009). The affective filter in second language teaching. *Asian Social Science*, 5(8), 162. <https://doi.org/10.5539/ass.v5n8p162>
- Even, S. (2008). Moving in (to) imaginary worlds: Drama pedagogy for foreign language teaching and learning. *Die Unterrichtspraxis/Teaching German*, 41(2), 161–170. <https://doi.org/10.1111/j.1756-1221.2008.00021.x>
- Gardner, D., & Yung, K. W. H. (2015). Learner motivation in self-access language learning. *Innovation in Language Learning and Teaching*, 11(2), 159–176. <https://doi.org/10.1080/17501229.2015.1088545>
- Gottfried, A. E., Nylund-Gibson, K., Gottfried, A. W., Morovati, D., & Gonzalez, A. M. (2017). Trajectories from academic intrinsic motivation to need for cognition and educational attainment. *The Journal of Educational Research*, 110(6), 642–652. <https://doi.org/10.1080/00220671.2016.1171199>
- Guilloteaux, M. J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, 42(1), 55–77. <https://doi.org/10.1002/j.1545-7249.2008.tb00207.x>
- Haciomeroglu, G. (2017). Reciprocal relationships between mathematics anxiety and attitude towards mathematics in elementary students. *Acta Didactica Napocensia*, 10(3). <https://doi.org/10.24193/adn.10.3.6>
- Haley, M. H. (2004). Learner-centered instruction and the theory of multiple intelligences with second language learners. *Teachers College Record*, 106(1), 163–180. <https://doi.org/10.1111/j.1467-9620.2004.00326.x>
- Hill, S. O. (2015). Helping children discover dance: BYU's dance education program brings dance to elementary schools. *Brigham Young University Harris Fine Arts Center*. Retrieved from <https://hfac50.byu.edu/magazine/kinnect/>
- Hong, J.-C., Hwang, M.-Y., Tai, K.-H., & Lin, P.-H. (2017). Intrinsic motivation of Chinese learning in predicting online learning self-efficacy and flow experience relevant to students' learning progress. *Computer Assisted Language Learning*, 30(6), 552–574. <https://doi.org/10.1080/09588221.2017.1329215>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.2307/327317>
- Könings, K. D., Brand-Gruwel, S., & van Merriënboer, J. J. (2011). The match between students' lesson perceptions and preferences: Relations with student characteristics and the importance of motivation. *Educational Research*, 53(4), 439–457. <https://doi.org/10.1080/00131881.2011.625155>

- Lens, W., & Vansteenkiste, M. (2012). Promoting self-regulated learning: A motivational analysis. In D. H. Schunk & B. J. Zimmerman (Eds.), *Motivation and Self-Regulated Learning: Theory, Research and Applications* (pp. 141–168). New York, NY: Routledge.
- Lin, H. C. K., Chao, C. J., & Huang T. C. (2015). From a perspective on foreign language learning anxiety to develop an affective tutoring system. *Educational Technology Research and Development*, 63, 727–747. <https://doi.org/10.1007/s11423-015-9385-6>
- MacIntyre, P.D., Gardner, R.C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283–305 <http://dx.doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- MacIntyre, P. D., & Vincze, L. (2017). Positive and negative emotions underlie motivation for L2 learning. *Studies in Second Language Learning and Teaching*, 7(1), 61. <https://doi.org/10.14746/ssl.t.2017.7.1.4>
- MacKeracher, D. (2004). *Making Sense of Adult Learning*, (2nd ed.). Canada: University of Toronto Press Incorporated.
- Mega, C., Ronconi, L., De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology*, 106(1), 121–131. <https://doi.org/10.1037/a0033546>
- van der Meij, H. (2013). Motivating agents in software tutorials. *Computers in Human Behavior*, 29(3), 845–857. <https://doi.org/10.1016/j.chb.2012.10.018>
- Moreno, R. (2005). Instructional technology: Promise and pitfalls. *Technology-Based Education: Bringing Researchers and Practitioners Together*, 1–19.
- Mori, Y., & Mori, J. (2011). A Language in focus—Review of recent research (2000–2010) on learning and instruction with specific reference to L2 Japanese. *Language Teaching*, 44(4), 447–484. <https://doi.org/10.1017/S0261444811000292>.
- Moving and Grooving to the Beat of Math. (2016, March 9). Retrieved March 6, 2018, from <https://www.hmhco.com/blog/curious-classroom-contest-heather-francis>
- Pearce, J. M., Ainley, M., & Howard, S. (2005). The ebb and flow of online learning. *Computers in Human Behavior*, 21(5), 745–771. <https://doi.org/10.1016/j.chb.2004.02.019>
- Pekrun, R., Goetz, T., Titz, W., Perry, R.P. (2002) Academic emotions in students' self-regulated learning and achievement: A program of quantitative and qualitative research. *Educational Psychologist*, 37(2), 91–106. [https://doi.org/10.1207/S15326985EP3702\\_4](https://doi.org/10.1207/S15326985EP3702_4)

- Pekrun, R., Goetz, T., & Perry, R. (2005). Achievement Emotions Questionnaire (AEQ) User's Manual. *PsycTESTS Dataset*. <https://doi.org/10.1037/t21196-000>
- Phillips, E.M. (1992). The effects of language anxiety on student's oral test performance and attitudes. *Modern Language Journal*, 76(1), 14–26. <http://dx.doi.org/10.1111/j.1540-4781.1992.tb02573.x>
- Poo, M., Pignatelli, M., Ryan, T. J., Tonegawa, S., Bonhoeffer, T., Martin, K. C., ... Stevens, C. (2016). What is memory? The present state of the engram. *BMC Biology*, 14(1). <https://doi.org/10.1186/s12915-016-0261-6>
- Pourhosein Gilakjani, A. (2011). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal of Studies in Education*, 2(1), 104. <https://doi.org/10.5296/jse.v2i1.1007>
- Richards, J., Jiang, X., Kelly, P., Chau, J., Bauman, A., & Ding, D. (2015). Don't worry, be happy: cross-sectional associations between physical activity and happiness in 15 European countries. *BMC Public Health*, 15(1). <https://doi.org/10.1186/s12889-015-1391-4>
- Rockafellow, B. D., & Saules, K. K. (2006). Substance use by college students: The role of intrinsic versus extrinsic motivation for athletic involvement. *Psychology of Addictive Behaviors*, 20(3), 279–287. <https://doi.org/10.1037/0893-164X.20.3.279>
- Sanadgol, F. (2015). Anxiety, motivation and autonomy in Iranian high school students: A quantitative study. *Advances in Language and Literary Studies*, 6(1). <https://doi.org/10.7575/aiac.all.s.v.6n.1p.143>
- Schumann, J. H. (1997). The neurobiology of affect in language. *A Journal of Research in Language Studies*, 48, 361.
- Taylan, H. (2017). Türkiyede Üniversite Bağlamında Yabancı Dil Olarak İngilizce Öğrenen Yetişkinle. [The factors that affect language learning motivation of adult learners who learn English as a foreign language in Turkish university context]. *Journal of Turkish Studies*, 12(14), 411–430. <https://doi.org/10.7827/TurkishStudies.11395>
- Um, E. "Rachel," Plass, J. L., Hayward, E. O., & Homer, B. D. (2012). Emotional design in multimedia learning. *Journal of Educational Psychology*, 104(2), 485–498. <https://doi.org/10.1037/a0026609>
- Weinstein, D., Park, Gloria (2014). Helping students connect: Architecting learning spaces for experiential and transactional reflection. *Journal of Pedagogic Development*, 4(3).
- Wigfield, A., Tonks, S., & Klauda, S. L. (2009). *Expectancy-Value Theory*. In *Handbook of motivation at school* (pp. 69-90). Routledge.

- Zhang, Y., Lin, C.-H., Zhang, D., & Choi, Y. (2017). Motivation, strategy, and English as a foreign language vocabulary learning: A structural equation modelling study. *British Journal of Educational Psychology*, 87(1), 57–74. <https://doi.org/10.1111/bjep.12135>
- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166–183. <https://doi.org/10.3102/0002831207312909>

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## Appendix

### Condensed Dance ESL Curriculum

#### Course Outcomes:

1. Students will learn 20 vocabulary words from the TOEFL academic word list
2. Students will be acquainted with movement devices that can be used to help facilitate word recognition and memory
3. Students will be able to work collaboratively and creatively in groups
4. Students will be able to form complete sentences and choreographed phrases
5. Students will be able to recognize dance energy qualities, motion elements, and shape features

#### Target Vocabulary:

- |                       |                  |                    |
|-----------------------|------------------|--------------------|
| 1. Crucial (adj)      | 8. Wane (v)      | 15. Exclude (v)    |
| 2. Estimate (v/n)     | 9. Convert (v)   | 16. Flexible (adj) |
| 3. Interpretation (n) | 10. Erode (v)    | 17. Monitor (v)    |
| 4. Maximize (v)       | 11. Function (n) | 18. Reliable (adj) |
| 5. Minimize (v)       | 12. Pursue (v)   | 19. Secure (adj)   |

- |               |                   |              |
|---------------|-------------------|--------------|
| 6. Period (n) | 13. Transform (v) | 20. Vary (v) |
| 7. Retain (v) | 14. Assist (v)    |              |

**Week One:**

*Vocabulary:* Words 1-8

*Energy qualities:* collapse, percussive/explosive, sustained, suspend, swing, sway

*Monday:* Complete consent forms and questionnaires, play a get to know you game (The class forms a circle. Each person introduces him or herself along with a movement (“I’m \_\_\_ and I like to \_\_\_”). The class repeats, then starts from the beginning of the circle, adding on the new name and movement. Repeat until everyone has been introduced. Students then walk around the room the try to recall each person’s name), and introduce new vocabulary.

*Wednesday:* Review vocabulary and do energy quality activity (The class forms a circle. Everyone practices energy qualities as we introduce them with pictures. Review all energy qualities quickly before giving directions. Groups of 3-4 are formed. Each group selects four vocabulary words and must choose four energy qualities to match them. Groups create a movement for each word based on energy qualities. Students should be prepared to articulate why energy qualities were chosen to match certain vocabulary terms. Groups show the class their choreography, classmates guess what words they had).

**Week Two:**

*Vocabulary:* Words 9-13

*Motion types:* axial (roll, hop, bending, pulling, pushing, bouncing, kicking, twisting, sinking, slashing, jabbing, stretching) and locomotor (skip, leap, jump, gallop, run, slide, walk)

*Monday:* Introduce motion elements, introduce new vocabulary, and do sentence activity (Students choose one vocabulary word and write their own example sentence. They turn it in on a separate piece of paper without a name. Announce that their sentences will be used to help with our next activity on Wednesday).

*Wednesday:* Review vocabulary and do motion activity (The class practices motion qualities in a circle. Groups of 3-4 are formed. Each group selects one sentence made by a classmate last period. Groups use motion elements to create movement for each sentence. Groups show the class their choreography, classmates guess what words they had. Read the full sentence out loud and perform the choreography again).

**Week Three:**

*Vocabulary:* Words 14-20

*Shape features:* positive-negative, straight, symmetrical, asymmetrical, curved, twisted, angular

*Monday:* Introduce shape features and introduce new vocabulary.

*Wednesday:* Review vocabulary, review shapes, and do shape activity (Groups of 3-4 are formed. Each group chooses four vocabulary words from the front. Groups create shapes for each vocabulary word. Each group shows the class the shapes they made for each word. If time allows, they explain why the word matches the shape they chose. Groups create 8-16 counts of transition in between shapes and perform for the class).

**Week Four:**

*Vocabulary:* Review all words 1-20

*Monday:* Review vocabulary by matching, do sentence creation activity (Groups of 3-4 are formed. Each group picks 4 vocabulary words from the front. Groups write example sentences for each word chosen. Sentences can be cohesive when read together or they can have distinct subject matters. Check for grammatical accuracy before students proceed), do sentence analysis activity (Groups read through their sentences and circle words that can have distinct energy qualities and underline words that can have distinct shapes), do movement creation activity (Groups form movement and shapes for each word they circled and underlined, respectively. Groups rehearse these movements and shapes while saying the words with which they correspond. They then fill in the unchoreographed space of each sentence with motion elements. They rehearse while repeating the passage, but are told that they can choose to perform it with words, without words, with music, or in silence).

*Wednesday:* Review and complete group choreography, perform choreography, and complete post-course questionnaires