



**TOOLWIRE WRITING GAMES  
FALL 2015 PILOTS  
RESULTS AND ANALYSIS**

**Written by**

Dr. Douglas C. Beckwith, PhD, JD - Senior Fellow

**Research Support**

Ian Hendershot – Director of Client Solutions  
Deirdre Cohen – Client Success Manager

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## Preface

It is our privilege to share with you this groundbreaking research report documenting the use of the Toolwire Writing Games at 14 college and universities during the fall 2015 semester. Having searched for exactly this type of study about game-based learning for higher education since 2007, I can assure you that there have been few research reports providing this level of insight into the implementation and impact of game-based learning within foundational first-year courses.

The subject of this study is unique as well. The Toolwire Writing Games were released in 2015 as a digital courseware intervention designed to help students succeed in basic composition and developmental writing courses. The 17 learning modules incorporate features such as game-based learning mechanics, real time remediation, and performance analytics.

In addition, these games feature live-action video set in authentic workplace settings. Toolwire's goal has always been to make learning more engaging by demonstrating the relevance of foundational learning objectives from first year courses to real-world situations. Although in-house studies by our partners have demonstrated that this unique approach has had a measurable impact on student engagement and retention, this is the first report that we have initiated with multiple institutions willing to share detailed faculty and student feedback.

We would like to take this opportunity to thank the institutions, faculty members, and students who contributed to this report. Going forward, we will be excited to follow the impact of these digital learning tools as part of an ongoing longitudinal study. For our partners seeking ways to move the needle of student success within their first year programs, we hope they, too, will play an increasing role in helping us measure the impact of this digital courseware intervention.

Consistent with its dedication to continuous improvement, Toolwire has already made a number of improvements to the Writing Games based on the fall 2015 pilot feedback. Notably, these include rebuilding the Writing Games as a fully mobile offering and adding a feature that allows advanced students to navigate more quickly through the games.

Equally, Toolwire is interested in *how* faculty members use the games. The qualitative faculty and student data in this report provide several comments about how faculty members used the games in the pilot study and how they might use the games differently in the future. We are gratified to know that instructors found academic value in the games and that they are using the games in various ways to adapt to their ever-changing and diverse student populations. As Toolwire's Senior Fellow, I thoroughly enjoy sharing these best practices with fellow colleagues and speaking with them about ways to use game-based learning to make their courses more engaging and effective.

Along with the data, we have also provided some analysis and conclusions. Although these interpretations are open for debate and discussion, I do believe that the data speak for themselves. They indicate to us that there is an important role for game-based learning in higher education.

**Dr. Douglas C. Beckwith, PhD, JD**  
Senior Fellow, Toolwire & Professor of Practice, Arizona State University

## Background

In the autumn semester of 2015, Toolwire collaborated with 14 American colleges and universities and 26 members of their faculty to conduct a pilot offering of the Toolwire Writing Games. Toolwire provided 17 game-based simulation modules to the schools for use in introductory writing courses with, at minimum, 1049 students. From the 17 games, faculty selected those that would best align with their course learning objectives. Scores earned in student gameplay could be converted to points that applied to students' course grade.

This study and report address six research questions.

1. Did faculty believe that the Writing Games made valuable educational contributions to students in their courses?
2. Did faculty believe that the Writing Games contributed to students feeling more confident about their writing skills (in contrast to their knowledge of typical student confidence in sections of the same course without the Writing Games)?
3. Did the Writing Games increase students' engagement in the writing courses (in contrast to faculty knowledge of typical engagement in other sections of the same course without the Writing Games)?
4. Did the Writing Games allow faculty to use their instructional time more effectively?
5. In other course writing assignments, did faculty see improvements in students' performance that they would attribute to students having played the Writing Games?
6. Did faculty believe the Writing Games contributed to demonstrated improvements in students' abilities to meet the course learning objectives (in contrast to faculty knowledge of student efforts to reach the learning objectives in sections of the same courses without the Writing Games)?

## Methodology

The methodology supporting the research design incorporated mixed survey items (quantitative and qualitative) used to produce data for content analysis. The surveys, designed in-house by Toolwire personnel, were distributed via Survey Monkey.

During faculty training, Toolwire sought permission and received faculty approval to conduct mid-course and end-of-course faculty surveys on the use of the games. Further, Toolwire asked faculty to distribute a student survey to their classes. To ensure anonymity, students were asked to provide only the name of their school, no other identifying information was provided. End-of-course surveys were completed by 14 of the 26 faculty (54%) and 329 out of 1049 students (32%). Toolwire gathered data from the mid-course surveys as well, but those findings are not included in this report. Reasons for this decision are discussed toward the end of the report.

The end-of-course surveys incorporated Likert statements with which faculty members 1) strongly agreed, 2) agreed, 3) neither agreed nor disagreed, 4) disagreed, or 5) strongly disagreed. In addition, both faculty and student surveys asked open-ended questions. The faculty survey used 6 quantitative questions and 4 qualitative questions, and the student survey contained 5 quantitative and 2 qualitative questions.

Upon receipt of the data, Toolwire compiled the statistics from the quantitative items, aggregated comments from the qualitative items, and provided some brief analysis where relevant.

## QUANTITATIVE DATA AND ANALYSIS - FACULTY

### Faculty End-Of-Course Survey Results

N=14 of 26 Faculty Members

#### Value of Using the Games

1. Did faculty believe that the Writing Games made valuable educational contributions to the students in their courses?

##### Quantitative Response

Agree	Unsure	Disagree
86%	14%	0%

##### Related Faculty Comment – From Qualitative Responses ([See All Responses](#))

- *Yes, the games showed my students that yes; learning about grammar and mechanics can be fun! They also learned, which is most important. Many of my students need help with grammar and mechanics, but the college classroom cannot always provide this assistance. Tool Wire games offer students additional opportunities to practice these concepts.*
- *Yes, I would encourage other English instructors to at least give the games a try. I continue to like that these games are truly supplemental and are not trying to take the place of actual course content.*

##### Analysis

These faculty responses are important because they come from the institutions' frontline representatives responsible for the courses' academic rigor and students' educational progress.

#### Student Self-Efficacy

2. Did faculty believe that the Writing Games contributed to students feeling more confident about their writing skills (in contrast to their knowledge of typical student confidence in sections of the same course without the Writing Games)?

##### Quantitative Response

Agree	Unsure	Disagree
79%	21%	0%

##### Related Faculty Comment – From Qualitative Responses ([See All Responses](#))

- *The games help students gain confidence in multiple areas of writing.*

##### Analysis

These results suggest that the Writing Games played a key role in students becoming more self-assured in their ability to write better now and *in the future*. With increased confidence about their ability to improve their writing skills, students are much more likely to continue to practice and develop their craft. Further, *student self-efficacy* is currently a major academic research topic. These findings provide an important contribution to this research field and will be a very interesting topic to monitor and explore in future semesters.

### **Student Engagement**

3. Did the Writing Games increase students' engagement in the writing courses (in contrast to faculty members' knowledge of typical engagement in other sections of the same course without the Writing Games)?

#### **Quantitative Response**

Agree	Unsure	Disagree
64%	29%	7%

#### **Related Faculty Comment – From Qualitative Responses ([See All Responses](#))**

- *I believe that they enjoyed learning the skills in a fun and engaging way.*
- *I would recommend them. It is a fun, interactive, and engaging tool to help supplement other lesson plans.*

#### **Analysis**

Any learning asset that increases student engagement and reduces antipathy and anxiety about writing in a required composition course is an important addition to the course. It is not surprising that 29% of the faculty were undecided regarding the Games' impact on student engagement. Educators know that many uncontrollable personal and emotional variables can affect student engagement in any course. As a cross-reference, 70% of the students commented that the Writing Games made them more engaged in the course.

### **Faculty Course Management**

4. Did the Writing Games allow faculty to use their instructional time more effectively?

#### **Quantitative Response**

Agree	Unsure	Disagree
64%	29%	7%

#### **Related Faculty Comment – From Qualitative Responses ([See All Responses](#))**

No comments were submitted that were related to this topic.

#### **Analysis**

For an initial pilot, Toolwire was extremely gratified that two-thirds of the instructors said they were able to spend *more time* working with their students. Teaching a writing course to first-year students and providing meaningful feedback on student writing assignments requires an enormous amount of time. Anything curriculum committees can do to help writing course faculty members use their time more effectively and still reach their pedagogical goals makes for grateful and more contented faculty. In future semesters, Toolwire believes that the percentages above will increase as more institutions integrate the Writing Games with their LMS. LMS integration, a one-time process, enables faculty to take advantage of the Writing Games' auto-grading feature, a primary time-saving feature of these learning tools.

### Writing Skill Transfer

5. Did faculty see improvements in students' performance in other writing assignments that they would attribute to students having played the Writing Games?

#### Quantitative Response

Agree	Unsure	Disagree
50%	43%	7%

#### Related Faculty Comment – From Qualitative Responses ([See All Responses](#))

- *Students have demonstrated within class conversations, and on writing skills a much higher understanding of what is being required than students who have not done any games.*
- *Of those who responded to my questions about their experience, they had a favorable response, but I'm not sure about overall impact.*
- *It's difficult to assess the impact of writing games because of a lack of baseline understanding of student skills when they entered the course.*

#### Analysis

That half the faculty attributed noticeable student improvements to use of the Writing Games is a worthy achievement. Some of the qualitative comments reaffirm the value of the Writing Games in even more detail. Clearly, a large percentage (43%) reserved judgement. As at least one faculty member mentioned in the qualitative responses, it was challenging to respond with assurance based on the lack of knowledge about students' baseline knowledge entering the course. In the realm of academics, it is not surprising that faculty took a conservative position on questions such as this. Since effective skill transfer means the persistence of the skills in the future, going forward, Toolwire would like to find faculty willing to conduct longitudinal studies to assess improvements in students' writing skills in subsequent courses.

### Writing Skill Proficiency

6. Did faculty believe the Writing Games contributed to demonstrated improvements in the ability of students to meet the courses' learning objectives (in contrast to faculty knowledge of student efforts to meet the learning objectives in sections of the same courses without the Writing Games)?

#### Quantitative Response

Agree	Unsure	Disagree
50%	43%	7%

#### Related Faculty Comment – From Qualitative Responses ([See All Responses](#))

- *Yes. We use lab programs to reinforce skills taught in class. The writing games are far better than the usual electronic drills.*
- *I will recommend it as a suitable replacement for those instructors who A) already use a digital supplement, and B) find themselves annoyed, overwhelmed, or dissatisfied with those supplements.*

## Analysis

As referenced in a number of the qualitative responses and as our team hears from faculty on a daily basis, the Writing Games are “far better” than alternative digital courseware interventions for writing that are available today. This report contains a wealth of positive data from both faculty and students about how the Writing Games improved student writing skills. We, therefore, interpret this inconclusive quantitative data as the result of a faulty question. Instead of referencing “*course learning objectives*” a more precise question would have included “*course learning objectives mapped to Writing Game learning objectives.*” In the qualitative student responses, for instance, several students comment that the games were largely disconnected from the learning objectives of the course. The statement used, therefore, was confusing and defective. If used in future surveys, this question should focus on students demonstrating better results in the specific course learning objectives that were mapped to the learning objectives of the Games.

## QUANTITATIVE DATA AND ANALYSIS - STUDENTS

### Student End-of-Course Survey

N=329 of 1049 Enrolled Students

#### Usefulness to Course

1. The Toolwire Writing Games made a useful contribution to the course.

#### Quantitative Response

Agree	Unsure	Disagree
70%	18%	12%

#### Related Student Comment – From Qualitative Responses ([See All Responses](#))

- *I think that the Toolwire Writing Games helped me and will surely help others in their English class.*
- *Toolwire helped me to write my essays in the proper format. I found it helpful that it would give the correct answer if you got it wrong.*
- *In my opinion I loved it. it gave me the help I needed at the time*

#### Analysis

These student results are a positive indicator for an initial pilot. In the qualitative responses, positive comments outnumbered the constructive commented by 4:1. As a cross-reference, when asked a similar question, 86% of faculty “Agreed” with this statement.

### Engaged me in the Course

2. The Toolwire Writing Games made me feel more engaged in the course.

#### Quantitative Response

Agree	Unsure	Disagree
70%	15%	15%

#### Related Student Comment – From Qualitative Responses ([See All Responses](#))

- *Toolwire is fun and it helps me feel engaged in the course.*
- *I think game based learning should be incorporated in the curriculum because it can help students who have a low attention span, remain engaged and even participate in the work. Not everybody learns the same way and by providing them with the option of games as a method of information translation, it provides students with multiple learning styles another mode of learning.*

#### Analysis

Anecdotally, from previous Toolwire studies on other products, we have observed trends that lower performing students often provide our learning modules the highest marks while higher performing students are often more critical.

### Increased my Confidence

3. The Toolwire Writing Games increased my confidence in my writing skills.

#### Quantitative Response

Agree	Unsure	Disagree
66%	25%	9%

#### Related Student Comment – From Qualitative Responses ([See All Responses](#))

- *I think it helped a ton, and it made me feel confident in my work.*
- *Thanks for the website. it has helped me a lot by making me feel more confident about my writing skills.*
- *I liked it. It helped me with realizing the mistakes that I am making while writing and how I could improve on my writing each time.*

#### Analysis

Building students' confidence in their writing abilities is critical. Many first-year college students initially have a very low estimation of their writing abilities. They can be extremely sensitive to any feedback from instructors that the students see as negative. For this reason, the Writing Games' use of characters serving as "virtual mentors" providing students both encouragement and constructive feedback during game play helps the feedback appear more useful and relevant, not a personal attack.

## Improved my Skills

4. The Toolwire Writing Games improved my writing skills.

### Quantitative Response

Agree	Unsure	Disagree
68%	24%	8%

### Related Student Comment – From Qualitative Responses ([See All Responses](#))

- *I really liked it because it helped me review my writing skills and it also helped me in other classes.*
- *If my professor asked me for my opinion on the Toolwire Writing Games Series, I would say that it helped pinpoint what I needed to focus on in my grammar.*
- *I liked it. It helped me with realizing the mistakes that I am making while writing and how I could improve on my writing each time.*

### Analysis

It is pleasantly surprising and gratifying that so many of the students believe the Games improved their writing skills. Many first-year students, as seen in a few of the dissenting qualitative comment below, believe their writing skills are already sufficiently developed, leading many of them to resent being required to take *any* college writing course. We had no other writing samples from these students, so we have no way of evaluating the proficiency they claim to have.

## Recommendation for Future Use

5. The Toolwire Writing Games should be kept in this course for future students.

### Quantitative Response

Agree	Unsure	Disagree
69%	18%	13%

### Related Student Comment – From Qualitative Responses ([See All Responses](#))

- *The game series is fun, interesting, and very helpful. KEEP IT!!!*
- *I would tell him to continue doing it because it helps students understand everything when it comes on to writing styles with commas, quotes, where to put certain things and where not to put things. it was very helpful for me especially when I was writing my papers.*
- *I think that the Toolwire Series was beneficial to this course. It definitely taught me new aspects & rules to college writing.*
- *They were helpful to my writing in other classes, but did not relate to the course they were used in.*

### Analysis

For an initial pilot, we were pleased by the positive response to this question. From the qualitative data, a number of students commented that the games were a helpful learning tool; however, they weren't an appropriate fit for the specific course they were taking at the time. This notion may well be accurate because as pilot assets, the games were used in a wide range of writing courses.

## QUALITATIVE RESPONSES - FACULTY

Responses below are verbatim as submitted but have been grouped thematically.

### Impact of Games on Students

1. If you believe the Writing Games had an impact on your student, please briefly describe it.

#### **Improving students' writing skills**

- Students have demonstrated within class conversations, and on writing skills a much higher understanding of what is being required than students who have not done any games.

#### **Valuable practice tool**

- Students that used the games spent more time outside of class working to improve skills.
- The games gave students an opportunity to review skills that they already knew, while also providing them a chance to practice skill development in weaker content areas.
- Yes, the games showed my students that yes; learning about grammar and mechanics can be fun! They also learned, which is most important. Many of my students need help with grammar and mechanics, but the college classroom cannot always provide this assistance. Tool Wire games offer students additional opportunities to practice these concepts.

#### **Other responses**

- They found some of the information helpful, depending on the individual student's needs.
- I promoted the Writing Games and sent reminders each time. I asked for an email from them on the series and from the ones I heard, it was positive.
- I believe that they enjoyed learning the skills in a fun and engaging way.
- Clustered representative comments
  - Of those who responded to my questions about their experience, they had a **favorable response**, but **I'm not sure about overall impact.**(3)

#### **Limitations of this question**

- It's difficult to assess the impact of writing games because of a lack of baseline understanding of student skills when they entered the course.

### Colleague Recommendations

2. Will you recommend the Writing Games to other academic colleagues? If so, what will you tell them? *[formatting got screwed up here]* **Writing Games versus other digital courseware alternatives**

- Yes. We use lab programs to reinforce skills taught in class. The writing games are far better than the usual electronic drills.
- I will recommend it as a suitable replacement for those instructors who A) already use a digital supplement, and B) find themselves annoyed, overwhelmed, or dissatisfied with those supplements.

- Yes. But I would suggest that they be used in conjunction with hybrid classes or online classes where students are required to have training like this.

#### **Suggested use case**

- I would recommend them. It is a fun, interactive, and engaging tool to help supplement other lesson plans.
- Yes, for lower skilled students...perhaps developmental.
- Yes, I would encourage other English instructors to at least give the games a try. I continue to like that these games are truly supplemental and are not trying to take the place of actual course content.
- It would depend on what they are teaching and what the learning objectives are for their course.

#### **Other responses**

- The games help students gain confidence in multiple areas of writing.
- Yes. I will tell them that the games provide a unique independent learning experience.
- I see the benefits of immediate feedback.
- Based on what my students have told me, yes.
- I probably won't go out of my way to recommend them; however, I wouldn't discourage their use. Someone who was excited about the games could probably use them more effectively in class.
- Yes, and I have.

#### **Future Use of the Games**

3. Will you use the Writing Games in future courses? Please tell us why or why not.

#### **Instructional lessons learned**

- Yes. They appear to have worthwhile value. However, I will assign each game within a specific time frame instead of the more open-ended schedule use this semester. The students also said the revision games needed to be earlier in the semester.
- I continue to be interested in trying these games with fully online classes. I think the games would provide a level of course content interaction that is sometimes missing from online classrooms. Such interaction would likely be helpful for students.
- Love to. Would like to see Toolwire play into D2L. Having another website students go to proved taxing to students and myself.
- I've not fully decided. I want to try using the series from start to finish in a course rather than in the middle. Pricing could also be prohibitive.

#### **Other responses**

- Clustered representative comments
  - Yes. I think the games are valuable for skill review and skill improvement. (4)
  - Not likely. It costs money, and my department is not going to fund it. (2)
- I will not be using it in future courses, unfortunately. I will be teaching Humanities courses beginning next semester.
- Unsure; the department decides.
- Undetermined at this time.

## **Additional Comments**

4. Please add any additional feedback you would like to share with Toolwire.

### **Instructional lessons learned**

- I would like to see this imbedded in the course in a more substantial way to measure impact. As an extra credit assignment, it was hard to determine how effective the games were since few students made the choice to partake.
- I think that, with integration with D2L in the spring, these games will be much easier for students to access and to use.

### **Faculty and student support**

- I am grateful to have the opportunity to work with such a great system and amazing, wonderful people. Also, the technical support staff is fantastic. They follow up with students immediately, and are both friendly and knowledgeable.

### **Product suggestions**

- I've mentioned this before, but I'd like to see additional grammar modules so that section could be more comprehensive. I'd also like to see a MLA module.
- A suggestion for Toolwire: students can demonstrate understanding of picking selections. For instance, which looks more like an introduction, pick one. It would be great if more games were dedicated to students' craft writing samples on their own. For examples, craft a hook. Here are examples of what a hook looks like. How does yours compare? Etc.

### **Technical Comments**

*In response to partner requests, all 17 Toolwire Writing Games (originally Flash-based) have been **rebuilt in HTML5 and are fully mobile**. Synchronous Lab Play: The Writing Games can be played anywhere at any time. Depending on an institution's technology infrastructure and the number of students playing the game concurrently from the same on-site server, game performance can be less optimal when used concurrently in a computer lab by a large class. As a best practice, Toolwire generally recommends assigning games as asynchronous, self-paced learning tools. In this model, students practice skills outside of class so that they can use valuable class time receiving attention instruction from their instructors.*

- Other problem: this game only works on desktop computers. Most of our hybrid, multi-day hybrid, and online students are accessing the course on laptops, tablets, and smartphones, not desktop computers. Since the games crash when the entire class tries to play them during lab, that doesn't work either.

### **Other Responses**

- Biggest problem with students is they need repeated activities like this, and in class activities/lectures doesn't always cut it.
- The games that involved playing against a clock were highly approved, as the students felt they were really playing a game instead of just taking a quiz.
- Clustered representative comments
  - Thank you for the opportunity to use the games in class.(3)

## QUALITATIVE RESPONSES – STUDENTS

Responses below are verbatim as submitted but have been grouped thematically.

### Student Opinion of the Writing Games

1. If your professor were to ask for your opinion of the Writing Games, what would you say?

#### **Recommendations for future use**

- The game series is fun, interesting, and very helpful. KEEP IT!!!
- helpful, and they should keep on using it for the next generation.
- It's not bad, i wish all my english classes incorporated Toolwire Games in them
- I think game based learning should be incorporated in the curriculum because it can help students who have a low attention span, remain engaged and even participate in the work. Not everybody learns the same way and by providing them with the option of games as a method of information translation, it provides students with multiple learning styles another mode of learning.
- I think it should be incorporated into the course scheduled work. Its a , interactive way to learn.
- I would recommend it to all incoming students and just roll with it fun
- I would say I was pleased, and it was interactive.
- It was a helpful and interactive website to learn English skills
- I would tell my professor that the Toolwire Writing Games Series helped me a lot I learned more then I thought I would
- It was great and I would like to do it more!
- It's a lot easier to learn when it's interpreted into a game. I only complete a few but the ones I did were very helpful.
- I would tell my professor, it is a good educational game to have in her course, and she should keep it and I have learn a lot from it. Thanks for giving us the chance to play this.
- I think that the Toolwire Series was beneficial to this course. It definitely taught me new aspects & rules to college writing.
- Very good learning system and really enjoyed the "games" they designed overall. would highly recommend this for future students to come.
- It was very helpful and i would recommend the program to other students.
- I am glad he accepted the challenge of allowing us to be the ones to use this series.
- I will tell Professor \_\_\_ how much I appreciate her introducing Toolwire to me. It kept me on my toes and made me very critical in how I answered the questions.
- I would tell him to continue doing it because it helps students understand everything when it comes on to writing styles with commas, quotes, where to put certain things and where not to put things. it was very helpful for me especially when I was writing my papers.
- The Tool wire Writing Game Series was very useful, it helped me be a better writer, and it will help future students as well.
- I will say it is good it and it helps to improved our writing experience so other students should also have assesse to it
- I like it but I don't think you should make it something we have to do.
- Clustered representative comments

- It was great! (16)
- it was really helpful. (21)
- I didn't like it. (3)

### Improved my confidence

- I think it helped a ton, and it made me feel confident in my work.
- Toolwire has given me positive influence to become a better writer
- The Toolwire Writing Games Series helped me progress my writing to the point of my confidence growing in my writing.
- Though I don't feel that Toolwire exactly taught me a whole lot, the series helped when it came to gaining confidence in my knowledge. It helped assure me of what I have already learned previously and corrected me in detail to help improve my knowledge and skills.

### Improved my writing skills

- I really like Toolwire, it was very helpful with my writing. I will definitely go back if I very need some extra help.
- The Toolwire game series is very useful to help me better understand how to write and look for errors in writing.
- I think that the Toolwire Writing Games helped me and will surely help others in their English class.
- It helped for the most part throughout the semester. Even though I still need to work on some stuff
- The toolwire has helped me understand what my strong points are and what my weak points are
- The Toolwire was a help tool to motivate student to pay closer attention at their writing skills. It also helped with punctuation and language terms.
- I would say that tool-wire is very useful for those students who struggle with writing essays or anything
- That it was a useful tool that gave me more details and insight into writing well.
- Toolwire helped strengthen my writing skills but it was hard to understand some of the lessons.
- It does not increase the skills extremely however it does give a lot of interest in to the writing.
- Clustered representative comments
  - Really enjoyed it. I **improved my writing skills**. (31)
  - I really liked it because it helped me review my writing skills and it **also helped me in other classes**. (5)
  - If my professor asked me for my opinion on the Toolwire Writing Games Series, I would say that it helped pinpoint what I needed to focus on in my **grammar** (3)
  - It was a fun and useful way to **practice**.(3)
  - I feel that it is a good way to explain about certain topics, especially when it came to like the **citing sources** because that can sometimes be confusing (2)
  - They are interesting and helpful, and make it very easy to **understand the writing process**.(2)
  - It reminds you on the small details you may forget about writing and reading an essay. It also **helps you establish rules for yourself to improve your writing**. (3)

- Its a **great tool** to use for anyone that is struggling with writing or wants to improve in writing (8)
- It was a **task I had to do** for the class (4)
- I like the games, but I **dont know if they really helped** with my writing. (6)
- i would say it **doesnt really help** as much (7)

#### **Fun and engaging way to learn and practice writing fundamentals**

- It was a fun way of being able to properly learn grammar finding new ways to learn the material
- It was fun learning through the games but sometimes it can be more of a trial and error process.
- Its a fun way to go about improving someone's writing, although it cannot help everyone.
- Clustered representative comments
  - Toolwire is fun and it helps me feel **engaged** in the course.(10)
  - I really liked them! I thought they were **fun**.(13)
  - Great assignment. **Can get a little repetitive** and boring. (6)
  - I would say that it was a fun way to get involved but **not that useful**.(5)

#### **Good for reviewing writing basics**

- I think it was a good review of grammar, punctuation, and the rules of the English language that we didn't talk about in class, but still were able to go over on Toolwire.
- It was a fun game series that allowed me to participate without having to present in front the class. It helped to refresh my memory on the different types of sentences in writing.
- I would say it was a great tool to help remind me of some things I may have forgotten over the summer.
- Clustered representative comments
  - The games helped **remind me of some writing skills** that I have forgotten about. I was able to incorporate some of those skills into my writing for the class. (8)

#### **Comments/suggestions about how the instructor used the games**

- If my professor asks for my opinion on the Toolwire Writing Game Series I will tell him that it helped improve my writing skills, but that he should incorporate more class assignments that relate to Toolwire.
- I will say that they are obviously well put together, but I think the integration and usage of them in class could be improved.
- More assignments using the Toolwire Writing Games, especially before writing essays, would be very beneficial for us students.
- They were helpful to my writing in other classes, but did not relate to the course they were used in.
- I'm not sure they related to anything we actually did in the class, but it did provide helpful information that improved my writing.
- I thought they were amusing but they didn't relate to the course.
- It was very helpful with all types of writing that students are expected to learn. Not all the material in the games are covered in class so it was great to have it as a supplement throughout the course.

- it was a nice implement in the online course
- It is a great tool for everybody and especially for those of us that English is not our maternal language.
- It was a good tool to use for homework.
- it was helpful and also a good opportunity for extra credit
- It was an interesting alternative to just reading and writing to improve our skills. It was a nice break for the brain to be able to absorb more useful knowledge.
- I enjoyed it! It was a nice break from the usual writing journals or writing an exam I got to engage in something a little different from time to time.
- I like the games series, it was a different way to learn the material.
- Instead of doing writing work, These games show you how writing is important, along with giving great information about the different parts of writing.
- Tool wire was a change of pace and was fun to learn a little extra credit.
- I think it helped out some what in my writing skills. Its good to have a change in activities in class too
- Toolwire games is better then taking a quiz in class so in the future we sholud use it for every student
- I didn't feel like doing it, it was weird.
- Okay information, stupid gimmicks.
- It was a pain to get them all done in a short amount of time, however, it was a good learning experience.
- The once a week Quiz worked very well, by not overloading with a lot of quizzes.
- It had a good learning base but I think a teacher could do better

#### **Comments about game remediation features**

- I liked it. It helped me with realizing the mistakes that I am making while writing and how I could improve on my writing each time.
- In my opinion I loved it. it gave me the help I needed at the time
- I would say, it help me out on my essays. I knew what was wrong and right in my essay to go back and fix it.
- Honestly, although I was quite familiar with most of the information, some of the tutorials clarified what I did not understand fully.
- Toolwire helped me to write my essays in the proper format. I found it helpful that it would give the correct answer if you got it wrong.
- I would say that i prefer constructive criticism to help my writing skills

#### **Rigor**

*As demonstrated by the comments below, student comments related to "rigor" covered the full-spectrum. During the pilots, faculty used the Writing Games in courses ranging from developmental, first year courses up to 300-level courses.*

- It was very challenging and useful
- The toolwire was a little hard that the beginning but after awhile it was fine.
- Toolwire is a unique and fun way to learn material. I enjoy it. Sometimes it is just too difficult.
- It was okay, most of it was too easy.
- It's to easy.
- They're easy, but I feel like you don't really learn much when doing them.

- That I was not a huge fan of Toolwire but I can see how it could be beneficial to some.
- I feel it will probably be useful for certain students depending on what they work well with.
- It is a great for students in college.
- Not very interested in it, seems better for younger students. It would better appeal to younger people.
- Its easy but way to long.
- That it was a little bit childish, but still useful and educational.
- It was a useful tool but seemed to be remedial at points

### Module length

*In response to the comments below, Toolwire added a new feature that allows students to fast forward live-action video content. It is important to note that the video footage used to disseminate content related to the key learning objectives. For advanced students, the video controls will cater to their level and help them accelerate play. For weaker students, however, skipping video content may impact their performance. Ultimately, students who try to take shortcuts may need to go back and revisit the lessons if they want to improve their score.*

*Also, the primary learning activity for several of the Writing Games is a challenge with three levels. In order to advance to the next level, students must submit three correct responses. For students struggling with the material, these games, in particular, can take longer than the norm. As referenced by some of the comments below, however, these practice intensive learning modules can be very beneficial for students who are invested in their learning.*

- I think the Toolwire Writing Games Series is beneficial to all students who take the time to use it.
- It is a great game that if played with attention, will be very useful in the course.
- I think toolwire has helped improve my writing skills, but only if I was fully committed to that certain toolwire experience.
- It was a good supplemental tool ,however it was difficult to keep up with in addition to a lot of other classwork.
- I liked it. I thought it was very helpful. I liked all of the games we played to help us understand more. Sometimes the talking was long but it wasn't bad.
- They are very time consuming, other than that they were okay
- I felt like when I did the games, half the time I was just going through the motions because I just wanted to get it done
- I would say that I appreciated how short they were and the information that they gave me to improve my writing skills.
- It's good to show someone how to do a certain thing within writing, but it is not very attention grabbing. Other than that, it is helping get the information across.
- I liked it over-all. I just think there needs to be more quiz questions and less talking.
- Though some of the scenes were cheesy, sometimes that can be good for knowledge retention.
- I like toolwire, it relates to class and helps but it is inconvenient and very time consuming
- it was okay but the characters personalities could be better

- It didn't really do much for me. Usually skipped over what the people had to say and just tried over and over until i got the answer right.
- Clustered representative comments
  - They are ok except they are too long. (19)

### **Usability / Technical Comments**

*Login: There are two basic ways for institutions and instructors to provide deliver these learning modules. The first method, via LMS integration, allows students easy, single sign-on access. The second, Toolwire's "Voucher Method", requires no initial set-up; however, students must follow several steps to redeem an access code. Based on student feedback, Toolwire has simplified the "Voucher Method" login instructions. In addition, the Toolwire Studio produced a short 1-minute, step-by-step video walking students every step of the way through this log-in process. In addition, Toolwire discovered that a number of students misinterpreted some of the characters on their Writing Game access card. To address this, Toolwire changed the font on this card.*

*Synchronous Lab Play: The Writing Games can be played anywhere at any time. Depending on an institution's technology infrastructure and the number of students playing the game concurrently from the same on-site server, game performance can be less optimal when used concurrently in a computer lab by a large number of students. As a best practice Toolwire generally recommends assigning games as asynchronous, self-paced learning tools. In this model, students practice skills outside of class so that they can use valuable class time receiving attention instruction from their instructors.*

- Usability
  - It was helpful and easy to understand and complete.
  - It needs more explanation
  - Toolwire can be very useful to students. However, there some need to make some changes to make toolwire better and useful for students.
  - I enjoyed it however the layout of the games themselves could have been reworked somehow.
- Clustered representative comments
  - It was helpful for me when it worked, other times it did not work (9)

### **Additional Feedback**

2. Please provide additional feedback you would like to share with Toolwire.

#### **Recommendations for future use**

- Thanks for the website. it has helped me a lot by making me feel more confident about my writing skills.
- At first I did not care to much about playing the game, but once I start play it I began to enjoy doing so. It is a good educational web site and I really like it I would recommend it to others, I hope I can. Job well done Toolwire.
- They games were good, and I think that they should be keep in the course for future students.
- Tool wire is a very helpful program that should continually be used by Professors.
- Mrs. \_\_\_\_ is an amazing instructor. She really cares about her students and using this activity has helped many of us.

- I enjoyed having the opportunity to learn material without the boring lectures and worksheets.
- Clustered representative comments
  - more teachers should use this program in ESL (3)
  - I don't think it was worth my time (2)
  - Make it more fun.(2)

#### **Improved my writing skills**

- none i just like that it quizzed me and gave me hints of what i was messing up on and what i needed to do for something that i don't understand.
- The instructors are very encouraging and allow you to retrace and make the necessary corrections on mistakes made in the lessons.
- I enjoy that each game is focused on one specific area of writing. (sentence structure, paragraph format or grammar.)
- I will say it is a good writing game and every students should have assesse to it so that it help them to improve their writing skills.
- Clustered representative comments
  - Toolwire is a great learning tool. (11)

#### **Rigor**

- make this easier!
- It was very easy to use and made this class that much more fun!
- Clustered representative comments
  - This seems a lot more helpful towards high school students rather than college student. (4)

#### **Module length**

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- Clustered representative comments
  - The Games take to long and you can't skip anything. (24)

#### **Usability / Technical Comments**

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*concurrently from the same on-site server, game performance can be less optimal when used concurrently in a computer lab by a large number of students. As a best practice Toolwire generally recommends assigning games as asynchronous, self-paced learning tools. In this model, students practice skills outside of class so that they can use valuable class time receiving attention instruction from their instructors.*

- add more games in same subject
- Should have more practice before take the test.
- try making it more like a game thats really how i remember things its easier like that for me, and probably more people as well.
- Its nice and somewhat engaging, sometimes a little frustrating to deal but overall not too bad it was pretty accurate
- Please explain the lesson with better way
- Try new actors
- Clustered representative comments
  - easier way to log in and do activities (6)
  - Game playing is difficult to do in a large classroom because the games load slowly and stop working. (3)

## **Conclusion**

In March 2014, the Executive Committee of the Two-Year College English Association (TYCA) published a paper examining the challenges and concerns involved with educating today's incoming post-secondary students. The paper concludes with eight action items. Among these, one of the primary recommendations includes the following:

*Initiate improvement to developmental education programs and courses through research-based pilot programs that include rigorous assessments and student outcomes rather than mandating large-scale statewide or institutional changes.*<sup>1</sup>

This Writing Games Research Report provides a strong foundation of research to build upon in future semesters. As a next step, we look forward to gathering further research with our current faculty and encourage more department chairs and full-time faculty from other institutions to champion additional implementations that will monitor the efficacy of this exciting new courseware archetype for developmental writing programs.

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<sup>1</sup> The Two Year College English Association. "TYCA White Paper on Developmental Education Reforms." *Teaching English in the Two-Year College (TETYC)* March (2015):227-243. Print.