MLER Middle Level Education Research Special Interest Group

The Chronicle of Middle Level Education Research

MLER

MIDDLE LEVEL EDUCATION RESEARCH
SPECIAL INTEREST GROUP

Message from the Chair

Points of Interest:

- Message from the Chair

- Executive Advisor Report

- MLER-SIG Business Meeting Minutes

- Featured Article: Web-Based Learning Environments

Greetings from Vermont.

This time of year offers many of us a different pace, as teaching responsibilities often give way to research endeavors. Whatever the summer brings for your professional life, I hope it comes with rest and rejuvenation.

In April, I enjoyed connecting with MLER SIG members in New Orleans at the annual meeting of AERA, both at our SIG-

sponsored sessions and at our well-attended business meeting. Huge thanks are due to Dr. Steven Mertens, our current MLER SIG Program Chair, for his work in   putting together such an impressive and coherent program. I am also grateful to the many reviewers who took time out of their busy schedules to evaluate proposals that resulted in a high quality array of presentations. Additionally, I'd
(continued on page 5)

Penny Bishop

University of Vermont

Call for Posters for NMSA Research Session

National Middle School Association
the association for middle level education

NMSA.

Please consider submitting a proposal for the upcoming "Spotlight on Research" poster session sponsored by the National Middle School Association's Research Advisory Committee.

This session highlights

research that addresses issues in middle grades education conducted by beginning and emergent researchers and scholars.

It's also a chance for newer researchers to network and get feedback on their work. Check

out the following link for more information: http://www.rmle.pdx.edu/docs/Call_NMSA%20Poster%20session%202011.pdf

The deadline to submit is July 30, 2011.

RMLE Online Call for Manuscripts

Research in Middle Level Education

The editor of *Research in Middle Level Education Online* is seeking manuscripts concerning quantitative and qualitative research studies, case studies, action research studies, as well as research syntheses.

RMLE Online is an international, peer-reviewed research journal published by the National Middle School Association.

Guidelines for Contributors, a listing of the Editorial Review Board, and past issues of *RMLE Online* are available at www.nmsa.org

If you have questions, please contact Karen Swanson, Editor, at SWANSON_KW@ mercer.edu.

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NEWS FROM THE EXECUTIVE ADVISOR

Vincent A. Anfara, Jr., The University of Tennessee

It is hard to believe that AERA's submission system is open for the 2012 annual meeting in Vancouver, BC. I strongly encourage you to submit proposals to the MLER SIG and to volunteer to serve as a chair or discussant for our SIG-sponsored sessions. The number of sessions we are allotted is heavily weighted on the number of submissions—so, Submit! Submit! Submit!

The theme of the 2012 annual meeting is *Non Satis Scire: To Know is Not Enough.* Our Presi-dent, Arnetha Ball, in discussing this theme noted, "While we as educational researchers wholeheartedly agree that 'to know' is criti-cally important, we also recognize that the schol-ars who penned AERA's mission statement were, indeed, visionaries. They realized that we would need to act effec-tively on what we know so that we would remain relevant as an organiza-tion. In these times when far too many chil-dren in our global soci-ety have suffered—and continue to suffer—marginalization, neglect, and denigration, we must be vigilant in en-suring that our research is seen in the language of policy and legislation, as well as in the actions of teachers, administra-tors, school boards, par-ent groups, community organizers, foundations, and government offi-cials."

I just returned from Vancouver where I com-pleted my tenure with the AERA SIG Execu-tive Committee. The work of that committee has been some of the most rewarding and ful-filling professional de-velopment in which I *(Continued on page 4)*

AERA 2011 Annual Conference MLER-SIG Business Meeting Notes

April 8, 2011 - New Orleans, Louisiana

Cynthia Reyes, University of Vermont

Introductions and Agenda Review— Penny Bishop

Recognition of Outgoing Council Members - Chris Cook
Donald Hackman, Karen Bostic, and Kezia Curry were recognized for the contributions to the SIG.

Executive Advisor Report— Vince Anfara
Also currently serves on the AERA governing board. Focus of the governing board is to review what is working well and what is not working well, election process, and functions of each SIG, etc. The problematic SIGS are ones that have low numbers, who don't follow proper governance rules. What implications does this have for our SIG. Middle Level SIG is quite healthy, although membership has dipped below 180, and is currently 140. The board is looking at

having smaller SIGS combine, which may have its benefits but also constitutes other problems.

AERA is redesigning its website, and will roll out its plan in June/ July. There will be more social networking tools. Currently, there is Twitter/ Facebook. The AERA listserve can now have attachments.

Handbook Series: Handbook of Research now has 8 volumes.

CPT Project will be announcing tonight a release of an online training for Phase II, which can be reached at AERA MLER SIG link.

A new handbook will be coming out in May, which is the Legacy Project, a chronicle of the lives and works of the fathers and mothers of the Middle Level Movement. Soon, there will be a call for the second handbook that will relate to practices in middle

level education – teaming, syllabi, teacher education materials, and resources for middle grades teachers. This will effectively help individuals navigate the waters of middle grades education. Ken McEwin and Tracy Smith are the first editors of the Legacy handbook series.

Treasurer's Report - Shawn Faulkner
Balance is $5,400

Program Chair Report— Steve Mertens
Reported on the 38 proposal submissions, 1 symposium, 15 papers accepted, and 39% acceptance rate

We are one session down from last year.

Listed all of the MLER SIG sessions for this year. Also listed program reviewers for 2011.

The new process for AERA now follows that when you sign up to

review papers for AERA, you are signing up to review 10 papers.

Working Groups Report, Elections—Chris Cook
Incoming council members: Lisa Harrison, Nicole Thompson, Robert Capraro. Graduate Council Member: Nicole Miller (served for 2 years). Chris recognized Nicole's commitment to the SIG, and also noted that we should expand the list of current graduate students.

Outreach—Micki Caskey and Molly Mee
Under Molly's leadership, we contacted everyone and made personal pleas to the current membership list, which added 30 more individuals who didn't realize their membership had lapsed. They have brainstormed other ideas to expand on membership. Micki passed out new brochures for our SIG. Please pass on brochures to new members and share all the good work that the SIG is doing.

The Chronicle of Middle Level Education Research, the online publication of the Middle Level Education Research SIG, is seeking submissions. The MLER SIG publishes the *Chronicle* three times a year in spring, summer, and fall. We invite you to submit book reviews, brief articles of scholarly work, (including original research and reviews of literature), descriptions of research, or other events/information of interest to MLER SIG members.

Manuscripts should (a) be approximately 2,500 words in length; (b) be double-spaced with 1-inch margins in 12-point font; (c) follow the 6th Edition of *Publication Manual of the American Psychological Association* (2001) style guide; and (d) include a separate title page with author name, affiliation, and contact information. Aside from the title page, manuscripts should have no reference to the author(s) to ensure a blind review. Note: Manuscripts need to be prepared and submitted electronically as Word documents.

Submit the manuscript and title page to Chris Cook at cookc2@nku.edu

Save the Date!

**38th Annual
National Middle School Association Conference**

**November 10-12, 2011
Louisville, Kentucky**

NEWS FROM EXECUTIVE ADVISOR

(Continued from page 2) have been engaged. I hope that my "insider perspective" has given the MLER SIG some important information over the past three years.

Based on the work of the AERA SIG Executive Committee, I would like to use this update to inform you of the areas that we as a SIG need to focus on as we move forward in the coming year. You probably know that there has been a moratorium on the formation of new SIGs for the past 15 months. During that time, the AERA SIG Executive Committee has collected a large amount of quantitative and qualitative data and has defined what constitutes a "healthy and vital" SIG within the context of AERA. While the MLER SIG has been doing a stellar job in these areas, we must look critically at our efforts in the following areas: (1) leadership capacity building, (2) graduate student and new/emerging scholar development, (3) membership numbers and membership building initiatives, 4) advancement of the knowledge base and dissemination of educational research in the related field, and (5) proposal submissions and acceptance rates. If the AERA SIG Executive Committee report written in Vancouver in late May 2011 is approved by the AERA Council, then these are the criterion on which we as the MLER SIG will be evaluated. I encourage each member and officer of the MLER SIG to think about these five components of "healthy and vital" SIGs and to respond with significant contributions that will move our SIG forward in meaningful and positive ways.

This is the picture of the famous steam powered clock in Vancouver. See you April 13-18, 2012!

Vince

Message from the Chair (continued)

(continued from page 1) like to acknowledge the particular contributions of our Executive Advisor, Dr. Vince Anfara, who recently completed a three-year term on the AERA SIG Executive Committee. His involvement with that group kept our SIG consistently well informed and helped steer our course in a productive manner. And, finally, I thank our many MLER SIG members who presented their research at the conference. Continuing to share one's scholarship with others moves our field forward in important ways.

The annual AERA meeting also marked the beginning of our MLER SIG's new Graduate Student Mentoring Initiative (GSMI). Supporting our graduate students is a critical focus for the SIG as we emphasize leadership development. For the first time ever, we paired doctoral level researchers with more veteran middle grades researchers who hold common interests; these dyads met for informal networking and conversation during that week. For those of you interested in participating in the GSMI as either a graduate student or a mentor, please watch email for an announcement as we draw nearer to the National Middle School Association conference in November.

In addition to mentoring, our SIG continues to look for ways to expand our membership. Keeping membership numbers vibrant in these economic times can be challenging for any organization. I invite you to tell your colleagues and graduate students about the collegiality, presentation and publication opportunities and other benefits of our professional network and to encourage them to join the MLER SIG. *(Continued on page 6)*

MLER SIG Business Meeting Minutes (Continued)

(Continued from page 3)
Recognition -
Shawn Faulkner
Reminders that there are 2 awards: Graduate Student Award and Dick Lipka Award. The GSA winner for this year is Jacqueline Gale, The Role of Middle Grades Principals (University of Vermont); Dick Lipka Award criteria includes 15 years in the field

Leadership
Development—
Nicole Miller
Described mentor-mentee relationships.

We have 2 pairs this year, and hope to increase these pairings next year.

Publications—
Chris Cook
The Chronicle comes out 3 times a year and it is peer-reviewed. Submissions are not as abundant as we would like them to be. Chris encourages articles on pilot studies, literature review, collaborations between professor and doctoral student. The word requirement is

2,500 words. We envision this to be another solid opportunity for publication in the Middle Level SIG.

Common Planning
Time Project—
Micki Caskey and
Steve Mertens
It is a SIG-sponsored project and there will be a symposium on the project on Saturday.

Passed out a handout that announces the "Online Training" for Phase II of the National Middle Grades Research

Project on Common Planning Time. Demonstrated how to get this information on the MLER SIG link on the AERA webpage. There is a link on CPT Phase II Training Session that describes the progress of the project. This is an attempt to share this project with individuals who cannot always travel to the meetings. Phase II relates to the online teacher survey.

At present, it is still *(Continued on page 6)*

Send In Your News!

Please send any items, announcements, or information you would like to have considered for publication in the *Chronicle of Middle Level Education Research* to Chris Cook at
cookc2@nku.edu

The Newsletter is published three times annually – Spring, Summer, & Fall.

We're on the Web!
http://www.rmle.pdx.edu/index.html

The purpose of the MLER SIG is to improve, promote, and disseminate educational research reflecting early adolescence and middle level education.

Membership in the MLER-SIG connects AERA members who are committed to research issues related to young adolescents. SIG members exchange information and ideas through Annual Meeting presentations, newsletters, and informal gatherings.

Membership cost is $15/year. The MLER-SIG (#88) is listed on the third page of the AERA Membership Application Form.

MLER SIG Business Meeting Minutes (Continued)

(Continued from page 5)
possible to engage in this. Phase I of the project was free whereas Phase II will cost $50 per school, which could involve multiple teams per school.

Calls for Awards, Publications and Presentations
Shawn announced a call for proposal for NMSA Research Advisory Board Poster Session. Submission proposal is July 15, 2011.

Member Announcements:
Louisiana State U. Research: Call for Manuscripts related to charter schools and equity, and a position for Associate/Full; ALAN call for proposal for manuscripts dealing with cross-curriculum potential and language arts, "Stories from the Field."

Review Position in Leadership & Openings for Assistant Professor for Secondary and Social Studies and Secondary and Science

Announcement for a fully funded doctoral position at the University of South Carolina and a call for manuscripts for the South Carolina Middle School Journal were made.

Message from the Chair (Continued)

(Continued from page 5)
Most recently, I've returned from Milledgeville, Georgia, where I also had the opportunity to convene with many SIG members at a symposium sponsored by Southeast Regional Professors of Middle Level Education. A focus on the Middle Level Education Legacy Project provided a unique opportunity to bring together leaders of the middle school movement to focus on directions for the future. The considerable momentum and commitment was palpable during the three-day event.

Finally, as we look toward AERA's 2012 annual meeting, the time has come to submit proposals! The theme is *Non Satis Scire: To Know is Not Enough*, which is a call to promote "the use of research to improve education and serve the public good," an integral part of AERA's mission. Middle level education research continues to have impressive examples of using research to inform and improve practice. I encourage all of you to submit proposals by July 22, 2011 in order to share your work in Vancouver during the April 13-18, 2012 convening!

Does Interaction With a Web-Based Learning Environment Lead to Higher Levels of Writing Self-Efficacy for Sixth Graders?

Hiller A. Spires & Lisa Hervey, North Carolina State University

Introduction

Approximately 7000 students drop out of school daily with many of these students not possessing the basic writing skills needed to be successful with high school academic demands (Snow & Biancarosa, 2003). While new research findings on the acquisition of writing are resulting in instructional changes for young children, pedagogical changes are slower to make their way into middle school classrooms. Additionally, students who are writing on grade level but who choose not to write, or do so reluctantly, present a unique challenge to teachers. Research indicates a critical need for middle school students to acquire sustainable writing habits in order to develop fluency as they progress into more demanding academic contexts and ultimately into the workforce. Graham and Perin (2007) go so far as to say that for the 21st century, "writing well is not just an option for young people—it is a necessity" (p. 3). Middle school teachers repeatedly confirm current research findings as they express the difficulty they experience in trying to engage middle school students in successful writing experiences.

Given the fact that writing is a necessity for participation in academic, work, and civic life, how do teachers engage students in an effective process of learning how to become proficient writers? We are attempting to provide one answer to this question through the development of *Writing Village*, a web-based learning environment for sixth grade students. When the final phase of development for *Writing Village* is complete, students will be scaffolded to pre-select characters, settings and objects and then invited to plan and write a narrative. The program's natural language understanding models will analyze the student's narrative automatically. Through a process of active exploration and iterative process, students will be guided to incrementally elaborate and refine their stories, which will "come alive" in a virtual story world. It is anticipated that the multiple representations supported by the *Writing Village* environment will significantly enhance students' self-efficacy for writing.

The goal of this research was to assess the effects of an early development stage of *Writing Village* on students' self-efficacy with writing. The students interacted with an environment that is aimed at assisting them in crafting a more sophisticated narrative

writing product while simultaneously increasing self-efficacy for both writing activities and skills. The research team, comprised of computer scientists, educational researchers, and middle grade teachers, took a constructivist approach to helping students understand the structure of narrative communications, including story structure. When developing this instructional tool, the team used a design-based research approach that "seeks to trace the evolution of learning in complex, messy classrooms and schools, test and build theories of teaching and learning, and produce instructional tools that survive the challenges of everyday practice" (Shavelson, Phillips, Towne, & Feuer, 2003, p. 25).

Theoretical Underpinnings

The bodies of literature that provide the theoretical underpinnings for *Writing Village* are: a) writing as a social, cultural and cognitive process and b) writing self-efficacy.

Writing as a Social, Cultural and Cognitive Process

With pressures from a global information economy, there is a continued focus on writing as an essential skill for success in life. Over the past fifteen years, reviews of writing research have focused on cognitive processes for writing (Levy & Ransdell, 1996); stages of writing development (MacArthur, Graham & Fitzgerald, 2006); composition (Smagorinsky, 2006); and effective instructional strategies for writing (Graham & Perin, 2007). The consensus among researchers is that writing is learned or socially and culturally acquired as a set of practices in formal and informal learning environments. Seminal work by Flower and Hayes (1980, 1981) advocated a classic cognitive model of writing that focused on what writers do when they compose. This model examined the rhetorical problem in order to determine the potential difficulties a writer could experience during the composing process and was divided into two major components: the rhetorical situation (i.e., audience, topic, assignment), and the writer's own goals (i.e., the reader, the writer's persona, the construction of meaning, and the production of the formal text). The view that writing is typically a socially situated, communicative act is later incorporated into Flower's (1994) socio-cognitive theory of writing. Additionally, Bereiter and Scardamalia (1987) propose a model that suggests reasons for differences in writing ability between skilled and less-skilled writers. The difference is revealed in their two models of writing: the knowledge-telling model, whose basic structure depends on the processes of retrieving content from memory with regard to topical and genre cues, and the knowledge-transforming model, which involves more reflective problem-solving analysis and goal-setting. The second model suggests the idea of multiple processing, which is revealed through writing tasks that vary in processing complexity. The authors discuss the construct of mental representation as a writing strategy. The knowledge-transforming or intentional writing model is different from knowledge telling in that it involves setting goals that are to be achieved through the composing process, and the intentional achievement of those goals.

Bereiter and Scardamalia (1987) criticize the contemporary educational process that encourages passive processing and argue that the ability to grapple with and address both content and rhetorical issues calls upon a "dialectical reflection process." They assert that if students do not encounter writing assignments and expectations that routinely require knowledge transformational skills, they are not likely to be able to perform those skills spontaneously.

In the case of *Writing Village*, we hypothesized that the scaffolding properties of the environment would have a positive impact on middle school learner's levels of self-efficacy for writing.

Writing Self-Efficacy

Another key determinant of whether students employ appropriate writing processes and strategies rests in their beliefs that they hold about their capabilities to do so (Pajares, 2003). Students' beliefs of personal competence or self-efficacy can affect performance outcomes (Bandura, 1986; 1997). That is, explicitly teaching effective writing strategies and skills to students is not enough to ensure the appropriate application of those writing strategies and skills; students must also possess the belief that they can use the strategies and skills successfully. Research has confirmed that students' confidence in their ability to complete writing tasks is related to academic motivation variables such as writing achievement goals (Pajares, 2003), as well as to their writing competence (Pajares & Johnson, 1994; Pajares & Valiante, 1997). Specifically, self-efficacy beliefs influence how much effort students will apply on a writing activity and how long they will persevere when faced with difficult writing tasks; enhanced self-efficacy for writing leads to enhanced effort and persistence during writing activities.

Assessing students' self-efficacy beliefs for writing could provide teachers with specific insights about their students' academic motivation and behavior (Pajares & Valiante, 2006). Often, low self-efficacy for writing is due to an inaccurate understanding of what skills a writing task or activity demands of them (Pajares, 2003). As such, teachers could provide alternative instructional strategies or programs to help students better understand what specific skills and or actions are required to effectively complete a writing task. Identifying appropriate instructional strategies and interventions could be essential for altering all students' self-efficacy for writing.

In general, "self-efficacy makes an independent contribution to the prediction of writing outcomes and mediates between previous and subsequent achievement in writing" (Pajares, 2007, p. 239). However, researchers have reported a decline in students' confidence in language arts skills, including writing, beginning in 6th grade and continuing throughout subsequent middle school grades (Pajares & Valiante, 1999; Wigfieid, Eccles, Maclver, Reuman & Midgley, 1991). Simply put, middle school students with low self-efficacy for writing are less likely to successfully engage in tasks in which writing is required. Middle school teachers

should become aware of their students' self-efficacy beliefs for writing and subsequently allow those beliefs influence choices in instructional practices and strategies. Teachers could use the results of their students' self-efficacy assessments to evaluate the effectiveness of their own instruction as well as intervention strategies such as narrative-centered learning environments.

Given the role of cognitive processes along with the importance self-efficacy plays in writing, the aim of this study was to address the following question: How does interaction with a web-based learning environment impact sixth grade students' self-efficacy for writing activities and skills?

Methods

Participants and Design

Participants included 78 sixth grade students (50% male and 50% female) enrolled in a highly diverse magnet middle school in the southeastern United States. Approximately 5% of the participants received services as English as Second Language (ESL) students and 22% were identified as students with disabilities.

As part of the iterative design-based process for *Writing Village,* we were interested in confirming that this new "instructional tool" was viable in terms of influencing students' self-efficacy for writing. Therefore, we conducted a pre-post assessment to inform further development of the tool in anticipation of future research that will include different instructional conditions and controls. The 78 students were randomly assigned to two rooms where *Writing Village* was set up exactly the same on Dell laptops. Every student had access to a pair of earphones and a wireless mouse.

Writing Village **Learning Context**

Students first explored the *Writing Village* environment via a guided voiced tutorial. As seen in Figure 1, the voiced tutorial instructed students how to select the setting, characters, moral and objects for the fable they were to write In addition, the voiced tutorial provided students with information about navigation and other features available in the *Writing Village* environment such as how to review previous selections and use the spell check component.
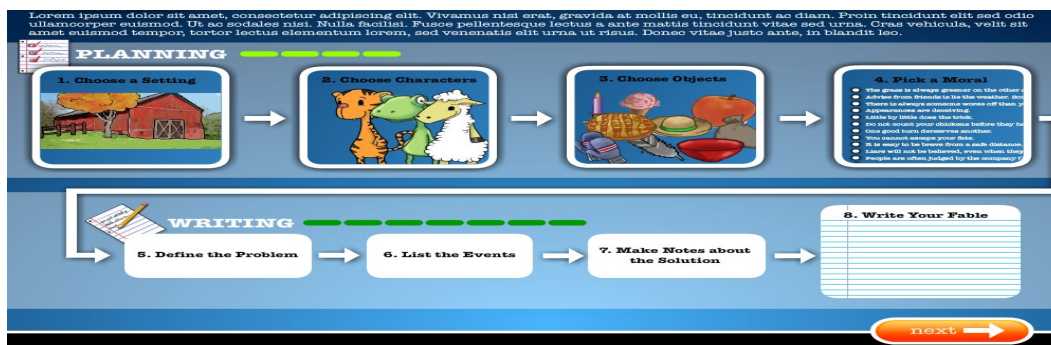

Figure 1: Screen capture of the *Writing Village* voiced tutorial.

Next during the initial planning phase, students were prompted to select a setting, characters, a moral and objects for their fable (Figure 2).

Figure 2. Screen capture of *Writing Village* in initial planning phase for setting selection.

The initial planning phase provided four settings, ten characters, nine different morals and twenty objects from which the students could choose from to include in their fable. As illustrated in Figure 3, once these choices were made, students could view their previous decisions and began structuring their fable using a planning and writing template.
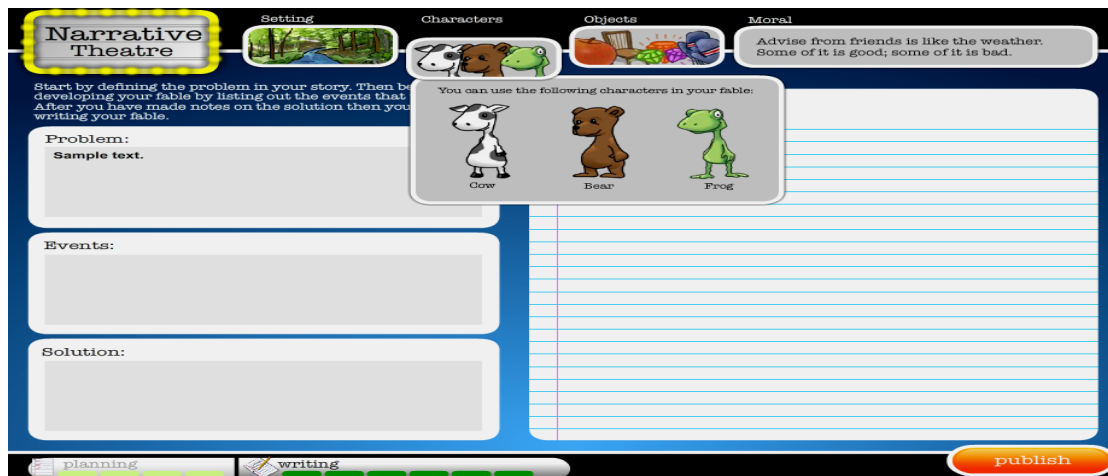
Figure 3. Screen capture of *Writing Village* planning and writing template.

The planning area of the template (Figure 3, left-hand side) allowed students to write briefly about what they would like to happen during the beginning (when setting and characters are introduced), middle (conflict and problem development), and end (conflict resolution) of their fables. As illustrated in Figure 3, the top of the template contains windows that displayed their choice of setting, characters, moral and objects; and can provide more information when clicked on by the student.

After the planning information was entered, the student then began to use the writing area of the template as shown in Figure 4, students wrote the actual fable in this area that is supported by a spell-check function.

Figure 4. Screen capture of final planning and writing template in *Writing Village*.

The researchers used a detailed protocol to elicit students' participation during the planning and writing phase of their fable. The students received the following directions:

We are trying to learn more about how computer environments supports and enhances 6th grade students' creativity and writing achievement. We will ask you to continuously plan and write your fable. I'll be here in case anything goes wrong with the computer or the equipment. Please remember that it is very important to use *Writing Village* to plan and write your fable.

Measures

Writing self-efficacy scales. Student completed a series of pre- and post-measures assessing their perception of abilities and capacities for general writing activities and specific writing skills before and after engaging in the *Writing Village* environment. First, the Self-Efficacy for Self-Regulated Learning Scale (SESL; see Bandura, 2006) was adapted for writing activities to measure students' general beliefs about writing activities (e.g., *I can complete writing assignments*). The SESL contained 8 items and asked students to provide judgments about their belief's about general writing activities described on a 10-point Likert-type continuum from 0 (*I can not do this)* to 10 *(I am highly certain I can do this).* Second, the Writing Self-Efficacy Scale (WSES) (see Pajares, 2007) probed students to provide judgments about their confidence in their ability to successfully perform grammar, usage, composition, and mechanical writing skills, such as correctly punctuating a story or organizing sentences and paragraphs while staying focused on a topic (e.g., *When writing, I can get ideas across in a clear manner by staying focused without getting off topic*). The WSES consisted of 10 items asking students how sure they were that they could perform specific writing skills on a scale from 0 (*I can not do this)* to 10 *(I am highly certain I can do this).*

<div align="center">**Analysis and Results**</div>

Writing Self-Efficacy

Since prior research (Pajares & Valiante, 1999) indicated that middle school girls tend to perform higher on writing measures, we explored gender as variable. To examine if *Writing Village* influenced student's writing self-efficacy, repeated measures ANOVAs were conducted using pre and post SESL and WSES student ratings. The within subject's factor was occurrence and the between factor was gender. A significant main effect for occurrence and gender for SESL ratings was found, $F(1,72) = 21.95$, $p < .001$, $\eta^2 = .23$ and $F(1,72) = 9.63$, $p = .003$, $\eta^2 = .12$, respectively. All students rated their writing self-efficacy higher following their *Writing Village* interaction ($M = 8.09$, $SD = 1.96$) compared to before the interaction ($M = 7.73$, $SD = 2.18$). In addition, females ($M = 8.75$, $SD = 1.87$) when compared to males ($M = 7.43$, $SD = 1.87$) reported higher levels of self-efficacy for writing activities.

A significant main effect for occurrence and gender for WSES ratings was found, $F(1,72) = 24.21$, $p < .001$, $\eta^2 = .25$ and $F(1,72) = 4.54$, $p = .037$, $\eta^2 = .06$, respectively. All students rated themselves as having higher writing self-efficacy following the *Writing Village* interaction ($M = 8.50$, $SD = 1.91$) than before ($M = 7.83$, $SD = 1.99$). Females reported higher levels of self-efficacy for writing skills ($M = 8.93$, $SD = 1.78$) when compared to their male counter parts ($M = 8.07$, $SD = 1.78$).

<div align="center">**Discussion and Conclusions**</div>

The aim of this study was to examine how interaction with a web-based learning environment impact sixth grade students' self-efficacy for writing activities and skills. The results of the early development phase of *Writing Village* indicated that self-efficacy for both general writing activities (SESL) and specific writing skills (WSES) demonstrated a significant result for occurrence and gender. Specifically, females scored higher than males on both measures. These results are consistent with Pajares and Valiante (1999) who found when students were asked whether they were better writers than their peers, females expressed that they were better writers to greater degree then males did. The authors claim that these findings suggest females and males may use a different metric when responding to traditional self-efficacy scales.

Since we did not have a control group for this phase of the research, we cannot make empirical claims about the effectiveness of *Writing Village* per se. The teachers involved in the study anecdotally reported, however, high levels of engagement and writing production on the part of the students as compared to when they participated in standard writing assignments during classroom instruction Specifically, one teacher put it this way, "*Writing Villa*ge empowered my lowest performing students to produce a substantial piece of writing … I would love to use this in my classroom to further support all my students in writing tasks." It will be important to design a study with a control group as *Writing Village* enters the next iteration of development, which will include intelligent tutoring and embedded scaffolding. We are cautiously optimistic that *Writing Village* will provide a platform for

stimulating and increasing middle grade students' self- efficacy with the ultimate goal of increasing writing achievement. In *This We Believe* (2010), middle grade educators make a commitment to meaningful learning, challenging curriculum, and engaging learning approaches for the young adolescent. Essential to fulfilling this commitment is the thoughtful use of emerging technologies, which are an integral part of students' lives outside of school. Moving forward, *Writing Village* offers one example of how to leverage innovative technologies to engage students in curriculum-based writing. Engagement, along with increasing self-efficacy for writing, as we know, is the key to developing proficient writers at the middle school level.

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