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Feature Article

The Teaching Using Technology Studio: Innovative Professional Development to Meet the Needs of English Learners

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This study investigated the impact of an innovative professional development initiative on teachers' ability to use technological resources to improve English learners' academic language. The Teaching Using Technology Studio, a collaborative effort between school district and university personnel, was designed as a responsive professional development program for 16 upper elementary teachers in California. Pre–post scores on a knowledge/use scale and a Teacher Technology Proficiency Assessment, as well as teacher reflections, interviews, classroom observations, and field notes, showed significant changes in the teachers' knowledge of and ability to use technology to develop activities and lessons designed to impact academic language development. Student scores on district benchmark assessments and on the annual state assessment suggest that teachers' participation in this professional development initiative led to positive academic language outcomes for the English learners in their classrooms.
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Youngstown school district (pseudonym) is in an agricultural region of northern California and serves a community with a high population of English learners (ELs). The district was awarded a grant that provided interactive whiteboards (IWBs), student laptops, and digital cameras in all of the district's fourth- and fifth-grade classrooms. The overarching goal of this grant was to transform upper elementary school classrooms into technology-rich environments that support ELs' access to the resources and learning strategies needed to improve their academic language and understanding of grade-level concepts. Special emphasis was placed on academic vocabulary and writing strategies in core content classes. In order to achieve this goal, Youngstown teachers needed to learn how to use these technologies in meaningful ways, specifically for the academic language development of the ELs in their classrooms. This study focused on developing, piloting, and assessing the impact of a particular professional development (PD) initiative on teachers' instructional practices for teaching ELs and ultimately on the academic language growth of the ELs in their classrooms. The PD program, the Teaching Using Technology Studio (TUTS), was designed and implemented by faculty from Stanford University and Sacramento State University in collaboration with school district leaders. Through their participation in TUTS, Youngstown teachers developed their capacity to transform their classrooms and fully utilize their grant-funded technologies to create more effective learning environments for the ELs in their classrooms.

A CALL FOR IMPROVING ACADEMIC LANGUAGE DEVELOPMENT IN CONTENT AREAS

Recent waves of immigration into the United States have led to the public school enrollment of more than 14 million students for whom English is not their first language, and demographic data indicate that this trend will continue well into the future (Lopez, 2006; Marzano, 2004). As a result, meeting the needs of ELs is an urgent focal area for educational practitioners and researchers in the United States. Underscoring this urgency are the performance results of ELs on the National Assessment of Educational Progress

(NAEP), the nation's only ongoing assessment of what students know and can do in various subject areas. Only 4% of the fourth grade scored at the proficient or advanced levels on the reading portion of the NAEP. NAEP reading test data specific to California show that 25% of ELs score at or above basic and only 4% score at or above proficient. This is in comparison to 66% of English-only students who score at or above basic and 32% who score at or above proficient (Rampey, Dion, & Donohue, 2009).

In response to these and other data, practitioners and researchers are increasingly calling for improved academic language development in content area classrooms as a way to address the learning needs of ELs (Anstrom et al., 2010). Also contributing to these calls is the belief that academic language is one of the most important factors in the academic success of ELs; lack of proficiency in academic language has been increasingly cited as a major contributor to gaps in achievement between ELs and English-proficient students (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). In addition, the new Common Core State Standards, a national initiative of the Council of Chief State School Officers and the National Governors Association Center for Best Practices, call for specific attention to academic language development across all subject areas. However, academic language, which includes the vocabulary, syntax, and discourse styles of particular content areas, is complex and incorporates linguistic, cognitive, and sociocultural concerns (Kucer, 2005). In order to teach subject matter content to ELs, teachers must simultaneously teach the requisite academic language required for subject matter learning and the rigorous content that all students must master. Many teachers struggle to attend to both the content demands and students' linguistic needs in their instruction (Bryan & Atwater, 2002; Rodriguez & Kitchen, 2005).

Despite the urgent need for and enormous challenge of supporting ELs in the content areas, few teachers receive adequate preparation and ongoing support to do so. In a survey of 5,300 teachers of ELs in California, Gándara, Maxwell-Jolly, and Driscoll (2005) found that in classrooms where 26%–50% of the students were designated as ELs, more than half of the teachers had had no more than one in-service PD session devoted to the instruction of

ELs over a period of 5 years. Moreover, approximately one-third of respondents complained that the EL-focused PD sessions they did receive were of low quality and limited utility.

Various academic language development needs can be addressed simultaneously by promoting the use of visually engaging and language-rich technologies. Such technologies can build a multimodal background that fosters academic vocabulary development and literacy among ELs. Research literature suggests that new technologies can (a) provide ELs with contextualized authentic learning opportunities; (b) help students develop language and literacy skills as they make connections among text, images, video, sound, and animation; (c) encourage students to construct meaning and to make connections to their prior knowledge; and (d) teach students to be strategic learners (Zhao, 2003, 2005).

A number of studies, which we conducted over the course of 5 years, show a positive impact of participation in technology-enhanced units of instruction on upper elementary and middle school ELs' academic language development and content understanding (O'Hara & Pritchard, 2008a, 2009; Pritchard & O'Hara, 2011). This body of work convinced us that the use of new technologies, including IWBs, podcasts, video, multimedia presentations, and voice threads, engages visual, auditory, and sensory learning modalities of ELs in conjunction with stimulating interactive activities. However, in order for teachers to be prepared to use such technologies in support of students' academic language development, the structure of PD models is critical. If teachers are to fully utilize the potential of technology and access to digital resources for the academic language development of ELs, they must have access to generative professional learning experiences that incorporate the same interactivity and attention to visual, kinesthetic, and auditory paths to learning that they will be expected to develop with students (Miller, 2007). By engaging in an integrated process of explicit instruction with mentored support and both individual and collaborative experimentation, teachers can develop their capacity to use technology in the same active and meaningful ways that they will provide to students.

THE CONTEXT

The purpose of this study was to develop, implement, and assess the impact of a PD initiative that engaged teachers in a yearlong studio designed to increase their capacity to use technologies and create more effective learning environments for the ELs in their classrooms. The diverse northern California school district in which this study was conducted has an EL enrollment of 24%. Sixteen fourth- and fifth-grade teachers from three elementary schools participated in the program, and the average EL enrollment in the target classrooms was 38%. 100 ELs in those classrooms scored at a Level 3 or 4 on the California English Language Development Test and basic on the California Standards Test (CST) in reading/English language arts.

Participating teachers engaged in 56 hours of PD designed by a team of four university teacher educators who had extensive academic preparation and professional experience in the areas of technology usage, academic literacy, and language development. The primary PD facilitators were two university teacher educators, Paula and John, along with the two technology experts, Mike and Carol (all names are pseudonyms).

THE PROFESSIONAL DEVELOPMENT MODEL

The PD consisted of eight 7-hour studio sessions that combined demonstrations, experimentation with and design of technology learning models, mentoring, and collaboration. The key outcomes for TUTS were to (a) increase teachers' technology proficiency for using a set of new technologies; (b) facilitate teachers' development and enactment of instructional practices for using technology to foster the academic language development of ELs, focusing specifically on academic vocabulary and writing skills in the core content areas; (c) introduce teachers to a framework for integrating technology into instruction in support of these practices; (d) assess the impact on teacher knowledge and instructional practices associated with the PD; and (e) assess the growth in academic language achievement among ELs in participating teachers' classrooms.

TUTS was designed so that teachers would become active participants in their own professional learning and would be provided with the resources, including the time, materials, and intellectual support, they needed to develop and implement more effective and innovative lessons to meet the academic language needs of ELs. TUTS differed from other professional learning opportunities for teachers in part by focusing attention on experimenting with new practices over an extended period of time. The PD model included a balanced and integrated approach that involved explicit instruction, individual and collaborative experimentation, and support in the use of technology, specifically IWBs, podcasts, video, hypermedia authoring, and voice threads. The facilitators' regular attention to the interests and needs of participating teachers helped to balance explicit instruction with individual and collaborative experimentation. Additionally, as the skill sets of participating teachers varied, the teachers' support for each other became critical to their knowledge development.

Our model of PD combined a number of design elements, grounded in the research literature on effective professional development (e.g., Darling-Hammond & McLaughlin 1995; Hawley & Valli, 1999; Knapp 2003; Putnam & Borko, 2000; Wilson & Berne, 1999), in an effort to foster teachers' ability to create and implement innovative lessons and help them develop a repertoire of technology-enhanced instructional strategies to meet the needs of ELs. These design elements lead to a PD model that displays the following characteristics situated in practice; focused on student learning; engages teachers in active learning; includes modeling of instructional strategies; builds professional learning communities; designed to be sustainable; and integrates with other aspects of the school and district.

The content for the TUTS sessions was authentically *situated in the practice* of teachers' classrooms and schools. The teachers reworked and refined existing classroom curricula and units of practice to use technology for the academic language development of their ELs. A number of initial activities were *focused on the learning* of ELs and were designed to build teachers' foundational knowledge and understanding of how ELs acquire language, the important role of academic language for EL learning of content,

and formative assessment techniques for ELs' academic language development. During this time teachers were introduced to a framework developed by Cummins (2005) to guide their thinking about implementing technology-supported instruction for second language learners (see Appendix A).

In each of the TUTS sessions, teachers were *engaged in active learning* and provided with studio time to rehearse new instructional practices in a low-risk environment and to innovate and retool their instructional practices. The PD facilitators *modeled instructional strategies* to provide participants with the opportunity to experience these strategies as learners and then reflect on their learning. This included modeling strategies for the use of technology more generally and its specific use for the academic language development of ELs. For example, during one session PD facilitators led teachers through an activity in which they developed digital immigration stories using a program called VoiceThread. During this activity facilitators modeled strategies for developing authentic and meaningful writing assignments to engage students from culturally and linguistically diverse backgrounds and for using technology to scaffold writing instruction for these students.

The TUTS sessions were designed to foster *professional learning communities* at various levels. Teams of teachers from school sites participated in TUTS, as did the district's coordinator for instructional programs, the coordinator of assessment and accountability, and technology coaches. These teams were assigned specific school-based activities and tasks related to what they were learning in TUTS, and were asked to carry these out as a team between the whole-group TUTS sessions. For example, each participant was asked to design a lesson using technology and targeting EL science vocabulary development. His or her charge was to implement the lesson in each classroom, meet with the school-based team to debrief, and choose a lesson to present to the entire group at the next TUTS session. Between each of the face-to-face sessions, the teachers participated in online collaborations and communications through a Wikispace (see Appendix B for sample pages.) Teachers used this space to share technology tips, lesson plans, and other resources, all related to the

activities and content from the face-to-face sessions. Thus, technology skills were enhanced as participants used different technologies for specific activities tied to the foci of the PD sessions.

Ongoing inquiry was *sustained over time*, focusing teachers' attention on experimenting with new practices, engaging in cycles of inquiry using artifacts of practice, discussing and adapting lessons plans, and analyzing student work, all supported by the district's instructional leaders and the PD team. Including the coordinators and technology coaches in the PD activities enabled the PD to build the capacity within schools and the district to sustain the work beyond the time of the grant. The inclusion of these professionals also served to purposefully *integrate this project with other aspects of district change*. The program was designed in collaboration with these district leaders, was in response to a district initiative and stated need, and was aligned with the district's strategic goals.

RESEARCH DESIGN

This study investigated the impact of an innovative professional development initiative on teachers' ability to use technological resources to improve ELs' academic language. This study addressed the following research questions:

1. What impact, if any, did participation in TUTS have on teachers' capacity (knowledge and instructional practices) to integrate technology for the academic language development of ELs?
    a. How, if at all, did teachers' technology proficiency change following the PD initiative?
    b. How, if at all, did teachers' knowledge and practices regarding academic language development for ELs change following the PD initiative?
    c. How, if at all, did teachers' knowledge and practices regarding integrating technology in support of academic language for ELs change following the PD initiative?
2. How did academic language achievement of ELs in participating teachers' classrooms change over the course of the project?

This study used a mixed methods approach. Our quantitative methods included the administration of a preknowledge/use scale

(see Appendix C) at our initial meeting and a postknowledge/use scale administered at the end of the study. This instrument was used in previous studies (Pritchard & Monroe, 2002; O'Hara & Pritchard, 2008b) and was modified for use in this investigation. It was designed to measure participants' self-report of their knowledge and use of information related to the instructional strategies for integrating technology to enhance teaching of academic vocabulary and writing to ELs. In addition, a district designed Teacher Technology Proficiency Assessment was administered to all teachers at the beginning and end of the project. Based on California standards, English language arts benchmark assessments of target students were given five times throughout the school year, and assessment scores were analyzed to determine growth across the project.

Qualitative data collection and analysis included extensive field notes during all PD sessions from observing teachers engaged in the workshops and experimenting with technology. All sessions were videotaped and audiotaped, and we collected open-ended daily written reflections from each session. In order to study the nature of teachers' engagement in this PD, we applied the *content analysis and analytic induction method* as well as the *constant comparative method* (Merriam, 2003) to identify patterns and themes that emerged from these data. In the academic year following the PD, a series of 44 observations were conducted in each participating teachers' classroom. In-depth field notes were collected, and at times case study classrooms were videotaped. Teachers at the three school sites were also interviewed. These data were coded for a set of instructional practices for technology integration and academic language development.

Impact on Teachers' Capacity to Integrate Technology for ELs' Academic Language Development

The pre–Teacher Technology Proficiency Assessment showed that teachers came to the PD as nonusers or beginning users of interactive technologies (IWBs, podcasts, video, multimedia presentations, VoiceThreads), intermediate users of the Internet, and proficient users of word-processing tools. The assessment highlighted the fact that the majority of teachers used technology

for their own productivity but did not facilitate students' use of technology to enhance learning. The post–Teacher Technology Proficiency Assessment showed that teachers had improved all their technology skills over the course of the program, and the majority had moved from nonusers or beginning users to intermediate users of the interactive technologies. Teacher growth in technology literacy is illustrated in Table 1. Teachers' frequency of use increased, and the integration of technology into their teaching increased as well, as illustrated by Table 2.

Our analyses of the data from the pre– and post–knowledge/use surveys suggest remarkable gains in teachers' knowledge of types of methods to engage ELs in language development and actual use of such methods through technology. One important finding from these surveys was that after the PD, the teachers who had reported moderate knowledge and low use had closed that gap significantly. In other words, teachers not only knew more but were using what they knew to a greater extent than when the project began. Table 3 shows the pre and post mean scores and standard deviations for overall knowledge and use reported by the teachers, which all show statistically significant pre–post change as determined by a series of *t*-tests. On average, teachers came into the PD program reporting a low level of knowledge (1–2 on the survey) about integrating technology into the curriculum in ways that would promote students' language development and understanding of grade-level concepts. They also came in reporting a low level of use of these instructional components in their classrooms. Teachers reported a moderate to low level of knowledge (2–3) about strategies needed to improve the English fluency of ELs and their understanding of grade-level concepts.

TABLE 1. Teacher Technology Literacy Pre–Post Project

Areas of proficient use	*Pre*	*Post*
Internet use	66%	79%
Email skills	33%	92%
Interactive whiteboard	33%	46%
Multimedia use	25%	75%
Using video streaming	0%	15%

TABLE 2. Frequency of Technology Use and Integration by Teachers Pre–Post Project

Technology tools used once a week or more	*Pre*	*Post*
Handheld electronic devices	33%	54%
Video-based presentation devices	33%	100%
Video-based creation tools	33%	46%
Technology tools for instruction in reading/language arts	33%	83%
Technology tools to create instructional materials	67%	100%
Technology tools to communicate with colleagues	67%	100%

They reported a low level of use of these instructional components in their classrooms. The postprogram data show that on average participants reported a moderately high knowledge (4) in all areas. Post data also show that participants reported moderately high use (3–4) of all instructional components.

Our qualitative findings based on analysis of teacher interviews and 44 classroom observations during school site visits in the following academic year suggest that teachers were using technologies to teach academic language. Data indicate that most teachers were using IWBs daily. Many of the lessons observed showed teachers using the IWBs as a catalyst for language production and academic vocabulary development. Furthermore, there were many examples of language production among students that were directly connected to understanding content area concepts. Interview data support the notion that the alignment between the IWBs and the district's new curriculum, and the latter's inclusion in the PD, had supported teachers' sustained use of the IWBs.

The following two excerpts from our classroom observation field notes highlight ways in which teachers were integrating technology for academic language development. The first excerpt is representative of what we observed in a number of participating teachers' classrooms, where teachers involved students in hypermedia authoring projects. The central purpose of most of these projects was to reinforce students' understanding of newly learned content-specific words and to assess their ability to use these words in context. In most of the classrooms, students created these hypermedia products at the end of some unit of study,

TABLE 3. Teacher Knowledge/Use of Instructional Components Pre–Post Project

Knowledge of instructional components		*Use of instructional components*					
Integrating technology		Teaching English learners		Integrating technology		Teaching English learners	
Pre mean	Post mean	Pre mean	Post mean	Pre mean	Post mean	Pre mean	Post mean
2.19 (0.59 *SD*)	4.06 (0.66 *SD*)	2.28 (0.76 *SD*)	4.07 (0.50 *SD*)	1.86 (0.66 *SD*)	3.64 (0.58 *SD*)	1.98 (0.70 *SD*)	3.69 (0.70 *SD*)

where they used the key vocabulary in explaining the content, and created hyperlinks between these vocabulary words and different media used to represent their meaning.

Excerpt 1. In Cynthia's fourth-grade classroom, the students have been studying a science unit on earthquakes. On the day of the observation, Cynthia is having students work on a hypermedia report on earthquakes, and students are focused on using the following key vocabulary terms: *scale*, *prediction*, *magnitude*, *fault*, *seismic*, *disaster*, *epicenter*, *aftershock*, *tsunami*. To complete the project Cynthia grouped the ELs in her class into two heterogeneous groups with different levels of language proficiency. The students work together and create slides on each of the target words using images, drawings, narration, and animation to describe their meaning. Next, the groups write sentences about earthquakes that include the target words. Finally, students create hyperlinks between the words in the sentences and the slide about that word. Groups present their final reports using the IWBs.

The second excerpt is also representative of how teachers implemented practices from the TUTS program. A number of teachers engaged students in the creation of multimodal texts to help scaffold the writing process and foster vocabulary development.

Excerpt 2. The students in Louise's fifth-grade class have been working together to create digital stories about the immigration experiences of one member of their family. Students interviewed family members about their experiences and gathered photographs and short audio clips from these interviews. In pairs the students combined photos, narration, and music to create their multimodal stories. On the day of the observation Louise has chosen one example and engages the class in a discussion of how the images and sounds were used in each story to convey meaning and emotion. Students are then asked to work in small groups and generate a list of vocabulary words that could be used to convey that same meaning and emotion, and Louise posts this list on the whiteboard. Pairs of students come to the whiteboard and create descriptive sentences that incorporate these words.

A number of teachers had students work in pairs or small groups to complete activities similar to those described in these

two excerpts. Other teachers designed whole-class activities and used the IWB to structure and facilitate these activities. The observations and interviews revealed that technology use by teachers incorporated the use of IWBs more often than other technologies. According to the teachers, this was due in part to the fact that the new district curricula can be downloaded directly to the IWBs, which enabled teachers to integrate that technology in support of the new curriculum more easily than the other technological resources available to them. Another contributing factor is that the district has focused more of its technical support on the use of IWBs and not as much on the use of laptops. All teachers interviewed indicated they would continue trying to find meaningful ways to routinely integrate other forms of technology (e.g., laptops, digital cameras, Internet-based programs) into their instructional repertoire.

Change in ELs' Academic Language Achievement Over the Course of the Project

Based on California standards, English language arts benchmark assessments of target students were given five times throughout the school year. From the first to the fifth benchmark assessment, the number of correct answers by target students increased 11.6% for fourth graders and 22.45% for fifth graders, yielding an average increase among the entire target group of 17.02% during the 2010–2011 school year. In addition, pre- and post-CST results in English language arts show a reduction in the achievement gap between ELs and their English-only counterparts, as measured by the California Standardized English Language Arts test. Specifically, the target group of ELs scored 48 points below their English-only counterparts before the project and 35 points below their English-only counterparts at the end of the project.

The data available, and the lack of a comparison group, make it difficult for us to claim a direct link between changes in teacher knowledge and practice and the academic language achievement of ELs. However, pre–post data collected during the project show that the ELs' technology proficiency increased and that these students were using technology related to academic language

development with much greater frequency after the project than was the case before the project. Target students demonstrated improvements in technology proficiency over the course of the project, as illustrated in Table 4.

In fact, classroom observations conducted after the project showed that in 89% of lessons student use of technology tools was integrated into lesson content and related to academic language development. Together with the data on changes in teachers' knowledge and instructional practices, these data suggest that teachers' participation in the professional development led to positive academic language outcomes for the ELs in their classrooms.

CONCLUSION

Findings from this study suggest that PD models that are responsive to the needs and interests of participating teachers and that are situated in their practice, hold greater promise for authentic and generative teacher knowledge development. Specifically, models of PD designed around the key research-based practices of effective PD can positively impact teacher knowledge and practice for using technology to enhance the academic language development of ELs.

Learning how to use new technologies to further academic language development of ELs requires teachers to develop

TABLE 4. Target Students' Growth With Technology Proficiency Pre–Post Project

Use of technology	*Percentage increase*
Using spreadsheets to enter and calculate numbers	44
Using video cameras to make videos	17
Using multimedia software to create projects and assignments	23
Using interactive whiteboards to present information	37
Using drawing or painting software once a week or more	19
Evaluating Internet information for accuracy, relevance, completeness, and bias once a week or more	22
Using Internet to gather information once a week or more	12

knowledge and practice in three areas and to connect these in their instruction: technology use, academic language development, and the teaching of content. Learning to integrate technology into an existing schema for teaching content to ELs requires time to rehearse new teaching practices in a safe environment with peers and colleagues, enact practices in classrooms with ELs, and reflect on the enactment and refine instruction. This studio model of PD, designed around the key principles of effective PD, provided time for teachers to learn how to use the technologies in support of academic language development of ELs through explicit modeling, individual and collaborative experimentation, and expert and peer mentoring. The PD providers' ability to determine and respond to the needs of teachers, by balancing modeling with appropriate support, was a critical component in what participating teachers reported were authentic and generative learning experiences that promise to positively impact ELs' academic language development and understanding of grade-level concepts.

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APPENDIX A

The teachers and instructional leaders were introduced to the following framework, developed by Cummins (2005), to guide their thinking about implementing technology-supported instruction for second language learners.

Does the technology-supported intervention:

1. provide cognitive challenges and opportunities for deep processing of meaning?

2. relate instruction to prior knowledge and experiences derived from students' homes and communities?
3. promote active, collaborative inquiry?
4. promote extensive, engaged reading and writing across the curriculum?
5. help students develop strategies for effective reading, writing, and learning?
6. promote identity investment on the part of the student?

APPENDIX B

Wikispace Samples

APPENDIX C

Knowledge Use Scale Elements

Instructional components related to technology

1. How to promote, support, and model creative and innovative thinking and inventiveness using technology
2. How to engage students in exploring real-world issues and solving authentic problems using digital tools and resources

3. How to promote student reflection using digital collaboration tools to reveal and clarify students' conceptual understanding, thinking, planning, and creative process
4. How to model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments
5. How to design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
6. How to develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
7. How to customize and personalize activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
8. How to provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching
9. How to demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
10. How to collaborate with students, peers, parents, and/or community members using digital tools and resources to support students' success and innovation
11. How to model and facilitate effective use of current and emerging tools to locate, analyze, evaluate, and use information resources to support research and learning

Instructional components related to teaching English learners

1. How to bridge the gap between students' current understanding of a concept and the level of understanding needed to successfully comprehend what they are reading
2. How to promote active, in-depth processing of words and concepts by providing students with opportunities to process word meanings at deeper and more complex levels
3. How to create a language and word-rich environment that promotes vocabulary development and word consciousness
4. How to help students develop the ability to learn new words independently by teaching them independent word-learning strategies
5. How to motivate students to write by providing frequent opportunities and student input on topics
6. How to achieve an appropriate balance between writing conventions and purposeful assignments

7. How to develop authentic and meaningful writing assignments by building upon the existing resources that students from diverse backgrounds bring from their home environments
8. How to utilize various teaching strategies and instructional approaches to scaffold writing instruction for students from culturally and linguistically diverse backgrounds

Author Query Form

Journal: TESJ
Article: 58

Dear Author,
During the copy-editing of your paper, the following queries arose. Please respond to these by marking up your proofs with the necessary changes/additions. Please write your answers on the query sheet if there is insufficient space on the page proofs. Please write clearly and follow the conventions shown on the attached corrections sheet. If returning the proof by fax do not write too close to the paper's edge. Please remember that illegible mark-ups may delay publication.
Many thanks for your assistance.

Query reference	Query	Remarks
1	**AUTHOR: "English-only" is a bit of a loaded term. Would it be accurate to say "native-English-speaking" or "English-speaking" to replace this term throughout the article?**	
2	**AUTHOR: Please supply DOI numbers for ALL journal references, if available. DOIs are required in journal references and can be obtained at http://www.crossref.org/guestquery**	
3	**AUTHOR: Borko et al. 2008 does not seem to be cited in the text. Please indicate where it should be cited or delete from references.**	
4	**AUTHOR: Desimone 2009 does not seem to be cited in the text. Please indicate where it should be cited or delete from references.**	

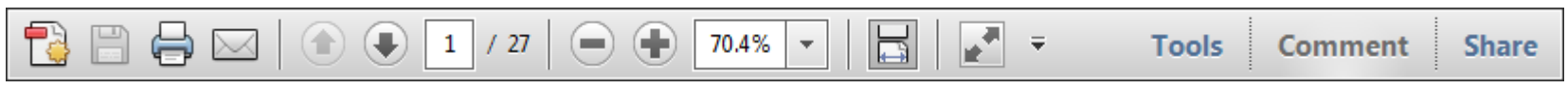
5	**AUTHOR: Unless Pritchard & O'Hara 2011 is a one-page article, please provide page range.**	
6	**AUTHOR: Please provide month of conference in Pritchard and Monroe 2002.**	
7	**AUTHOR: Wood & Ashfield 2007 does not seem to be cited in the text. Please indicate where it should be cited or delete from references.**	
8	**AUTHOR: It seems as though the columns headers are not aligned correctly over the columns. Please advise how it should look**	
9	**AUTHOR: Please provide title for Appendix A.**	

WILEY-BLACKWELL

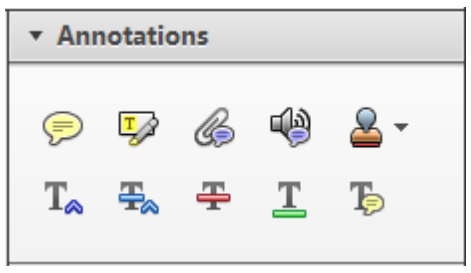
USING e-ANNOTATION TOOLS FOR ELECTRONIC PROOF CORRECTION

Required software to e-Annotate PDFs: Adobe Acrobat Professional or Adobe Reader (version 7.0 or above). (Note that this document uses screenshots from Adobe Reader X)
The latest version of Acrobat Reader can be downloaded for free at: http://get.adobe.com/uk/reader/

Once you have Acrobat Reader open on your computer, click on the Comment tab at the right of the toolbar:



This will open up a panel down the right side of the document. The majority of tools you will use for annotating your proof will be in the Annotations section, pictured opposite. We've picked out some of these tools below:

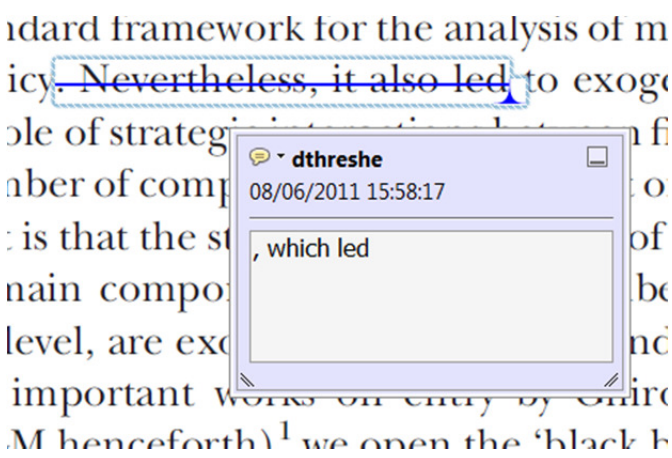


1. Replace (Ins) Tool – for replacing text.

Strikes a line through text and opens up a text box where replacement text can be entered.

How to use it

- Highlight a word or sentence.
- Click on the Replace (Ins) icon in the Annotations section.
- Type the replacement text into the blue box that appears.

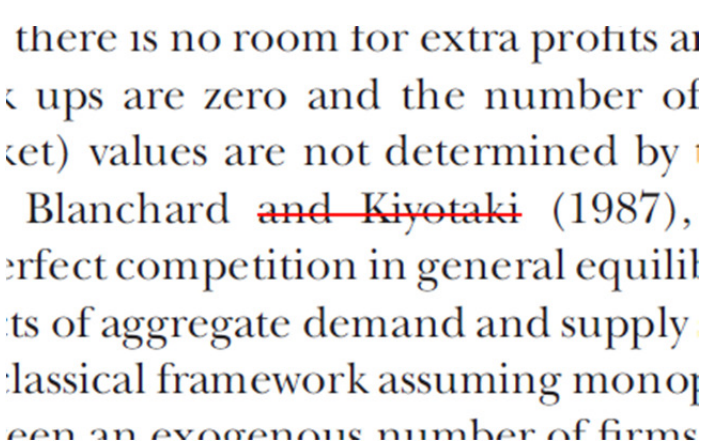


2. Strikethrough (Del) Tool – for deleting text.

Strikes a red line through text that is to be deleted.

How to use it

- Highlight a word or sentence.
- Click on the Strikethrough (Del) icon in the Annotations section.

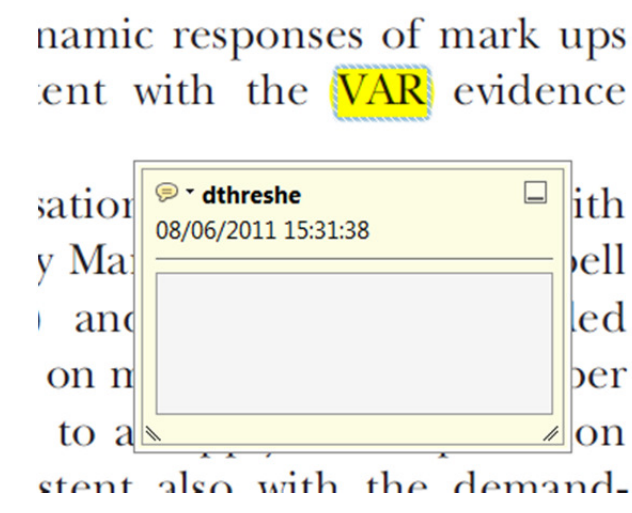


3. Add note to text Tool – for highlighting a section to be changed to bold or italic.

Highlights text in yellow and opens up a text box where comments can be entered.

How to use it

- Highlight the relevant section of text.
- Click on the Add note to text icon in the Annotations section.
- Type instruction on what should be changed regarding the text into the yellow box that appears.

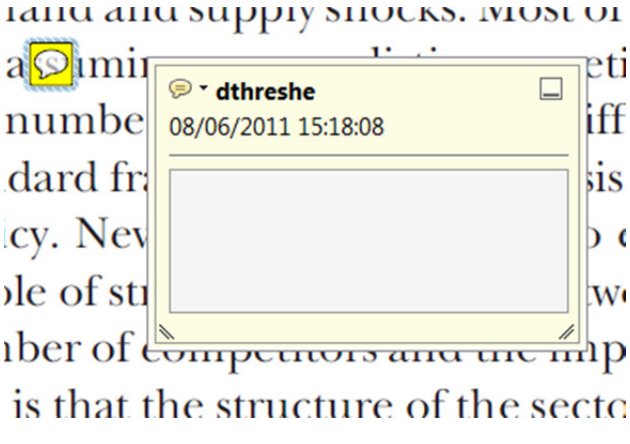


4. Add sticky note Tool – for making notes at specific points in the text.

Marks a point in the proof where a comment needs to be highlighted.

How to use it

- Click on the Add sticky note icon in the Annotations section.
- Click at the point in the proof where the comment should be inserted.
- Type the comment into the yellow box that appears.



WILEY-BLACKWELL

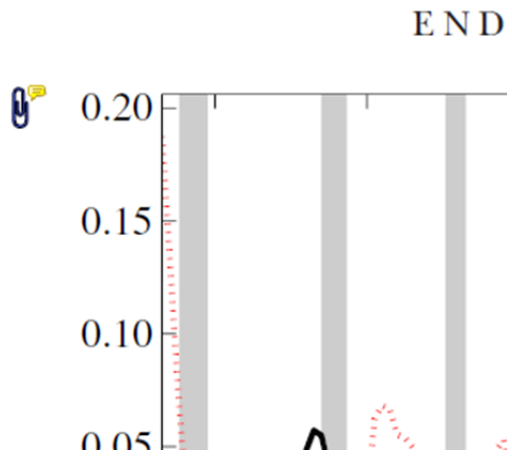
USING e-ANNOTATION TOOLS FOR ELECTRONIC PROOF CORRECTION

5. Attach File Tool – for inserting large amounts of text or replacement figures.

Inserts an icon linking to the attached file in the appropriate pace in the text.

How to use it

- Click on the Attach File icon in the Annotations section.
- Click on the proof to where you'd like the attached file to be linked.
- Select the file to be attached from your computer or network.
- Select the colour and type of icon that will appear in the proof. Click OK.

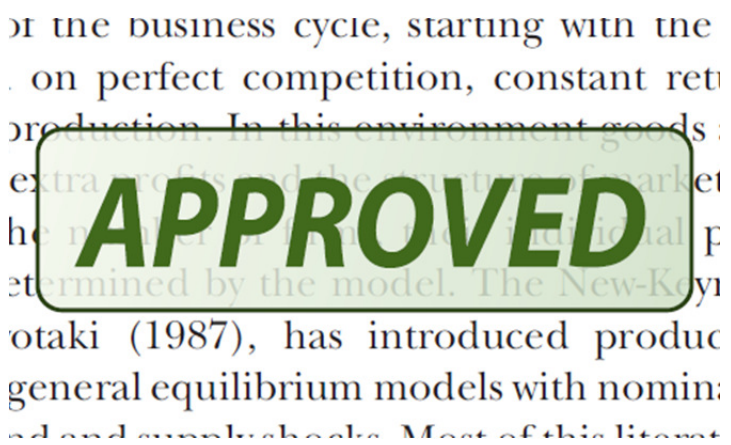


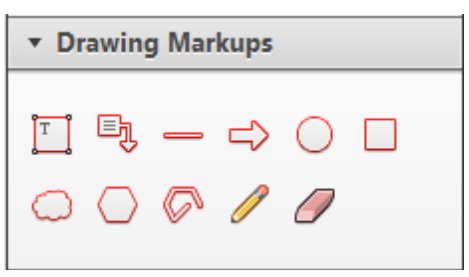
6. Add stamp Tool – for approving a proof if no corrections are required.

Inserts a selected stamp onto an appropriate place in the proof.

How to use it

- Click on the Add stamp icon in the Annotations section.
- Select the stamp you want to use. (The Approved stamp is usually available directly in the menu that appears).
- Click on the proof where you'd like the stamp to appear. (Where a proof is to be approved as it is, this would normally be on the first page).



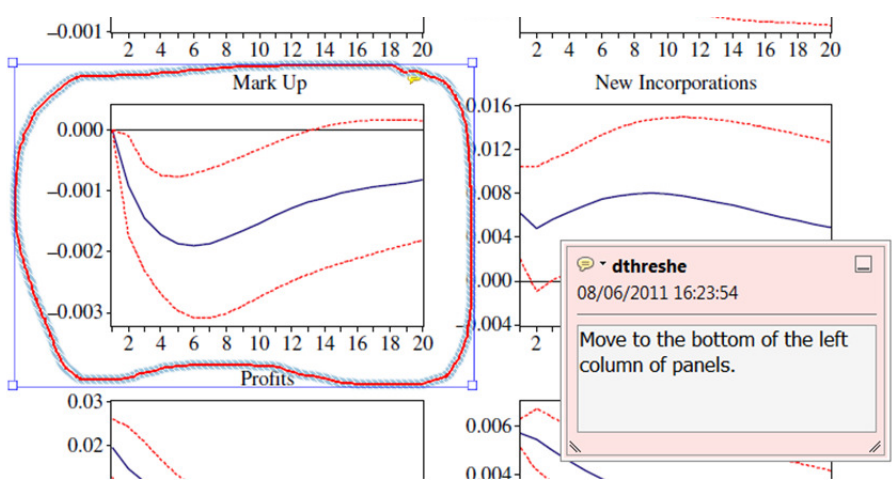


7. Drawing Markups Tools – for drawing shapes, lines and freeform annotations on proofs and commenting on these marks.

Allows shapes, lines and freeform annotations to be drawn on proofs and for comment to be made on these marks..

How to use it

- Click on one of the shapes in the Drawing Markups section.
- Click on the proof at the relevant point and draw the selected shape with the cursor.
- To add a comment to the drawn shape, move the cursor over the shape until an arrowhead appears.
- Double click on the shape and type any text in the red box that appears.



For further information on how to annotate proofs, click on the Help menu to reveal a list of further options: