Tips, Tools, and Techniques for Teaching in the Online High School Classroom

By Shantia Kerr

"In the online setting students may work independently and in isolation more often than in a face-to-face setting."

Abstract

The growing availability of online learning in K-12 education requires understanding of the tools and pedagogy necessary for effective teaching and learning. This paper provides recommendations to advance teaching and meaningful learning in online high school courses. Additionally, it provides principles of practice for teachers, students, and school and district level administrators. It concludes with a list of "best practices" for online, high school teachers. All recommendations are based on the findings from the author's research in three secondary online learning settings.

Keywords: high school, online learning, pedagogy, secondary, tips, virtual learning

nline learning has emerged as an alternative to traditional face-to-face instruction in American K-12 education. Therefore, it is necessary to identify key practices and recommendations for teaching and learning in the K-12 online class. The guidelines and recommendations presented in this article emerged from a multiple case research study of three different online high schools (i.e., a public school, charter school, and an online consortium of seven rural school districts combined with one community college).

The author's previous study (Kerr, 2009) explored how online high school teachers used online tools (e.g., course management systems; synchronous communication tools, audio, video; asynchronous communication tools; and assessment tools) to create meaningful learning environments for their students. Three high school American history teachers and their students were the participants in the study. Data collected included teacher interviews, observations, and documents. These data were coded and common themes found in the data were developed and clustered. This process continued until all data and the characteristics of all codes were exhausted. A cross-case analysis was conducted by comparing each individual case with the other cases to ascertain differences and patterns. Teacher participants were asked to review the findings generated from study of their class to affirm or support findings. This article provides tips, tools, and techniques for successful online education generated from the previous study's findings.

Teachers

The successful online course is a result of teachers and students maximally utilizing the tools afforded to them. It is often necessary for teachers to not only consider how they use tools in their online classroom, but also scaffold and encourage students' use of them as well. In order to create an optimal online learning environment for students, teachers should monitor the adoption of tools by students in an effort to ensure that students use all resources to their full potential. Other key considerations for teachers include the need to provide timely feedback, encourage student-student interaction, consider students' technology access when planning learning activities, guard against diminishing the value of content knowledge, and use their online course to teach content and literacy skill building. Addressing each of these components in an online setting will help facilitate student success.

In addition to encouraging students to use all available resources, teachers must use online tools efficiently. This is especially critical when the use of tools facilitate student learning. Specifically, teachers must use communication tools to provide timely, consistent feedback to students. When students do not receive timely, consistent feedback, throughout the duration of the course, they miss numerous opportunities for scaffolding, higher order learning, and the development of meaningful learning.

Online K-12 teachers should also consider strategies to facilitate more communication among students. This consideration is important when teachers desire student-to-student communication within their courses. Structured interactions are often necessary to ensure students engage with other online learners (Dow, 2008; Yang, Yeh, & Wong, 2010). In an attempt to encourage student-tostudent interaction, teachers could facilitate conversations at the beginning of the course and gradually allow students to take responsibility for discussions (Mason & Berson, 2000). Another suggestion calls for teachers to assign roles to students (e.g., questioner, responder, reviewer) for online discussions that would require students to facilitate and monitor course discussions (Duphorne & Gunawardena, 2005). Each of these strategies may help facilitate collaboration among students.

In addition to the aforementioned suggestions, teachers must consider student technological access (including Internet connection speed) as they develop online courses. In some online schools, students are given resources (laptops, webcams, etc.) as needed to participate in online courses. However, this is not characteristic of all online learning sites. Teachers should be fully aware of the type of resources and access students have to ensure proper use of all tools intended for instruction and learning.

There are many different approaches to teaching online high school courses. While teachers are diverse in their approaches and in the tools used for teaching and learning, it is necessary for teachers to ensure content area learning among students. This process includes guarding against diminishing the value of content area learning in order to ensure acquisition of other knowledge (e.g., life skills or technology). Teachers should ensure that students gain content knowledge as required by state and national standards in addition to other pertinent skills.

Finally, online teachers must address English grammatical skills. The author found that secondary students' writings in discussion board, journal, and log entries showed severe misuse of grammar (Kerr, 2009). Teachers should consider using online discussions as an opening to teach contentarea literacy skills. In their book offering principles for effective online learning, Clark and Mayer (2003) encourage teachers and designers to use conversational writing style (versus formal language) in written online discourse. The authors suggest that conversational style writing personalizes information and causes learners to feel as if they are conversing with a learning partner. The researchers suggest conversational language in online discussions. However, students and teachers should still adhere to common grammar and punctuation rules.

Students

Research acknowledges that online learners must be highly motivated in order to achieve in an online course (Chyung, 2001; Park & Choi, 2009; Roblyer, 1999; Sankarn & Bui, 2001). The author's study (Kerr, 2009) supports prior research and extends it to state that in order for meaningful learning to occur, online learners should articulate clear learning goals, complete all assignments, and take initiative in their learning process. This is a good practice for all learners. In order to effectively assess student progress, students should identify clear, attainable, recognizable goals at the start of the course and monitor, revise, and create new goals throughout the duration of the course. Teachers should help students in this endeavor. Additionally, students should aim to complete all of the assignments and the requirements for each assignment. Students compromise their learning when they do not adhere to the guidance and direction of their teachers. Finally, students must take initiative in their learning process. In the online setting students may work independently and in isolation more often than in a face-to-face setting. Therefore, they must take an active role and primary responsibility in their learning process.

School and District

Some students participate in an online course as a part of their regular face-to-face school day. In these instances, schools should consider providing a room or quiet space for students to participate in their online course. Such a space would eliminate distractions (e.g., noise, non-participating students) from the regular classroom that may hinder student learning. Additionally, when planning for online learning, district and school administrators must consider student access, both at home and within the school building, to technology that would facilitate effective use of all tools intended for online study. As schools and school districts carefully plan for online learning within the regular face-to-face school day, they must consider student access to the proper tools and create an environment conducive to meaningful learning.

Best Practices

The following "best practices" for teaching in online high school courses emerged from the multiple case research study across three online high school sites mentioned earlier. The researcher identified instruction that was most conducive to student learning among the sites researched.

- 1. Include multiple sources of content. Including a variety of purposefully selected primary and secondary web sources may enhance your online course. Exposure to numerous sources provides students with a range of perspectives domestically as well as globally. Moreover, variety in sources enables students to make intelligent, informed opinions and decisions.
- 2. Always provide timely, thorough feedback. The online setting can create feelings of distance and disconnect. Prompt and thorough feedback helps students understand their progress in the course. Additionally, it helps student's understand teacher expectations.
- 3. Provide opportunities for student choice (e.g., create an editorial or opinion piece for magazine article, blog, graphic organizer, or research essay) in evidencing their understanding of content. Ensuring students have a choice in how they will represent their understanding promotes autonomy and encourages students to take responsibility for their learning. It also encourages the differentiation of learning, as learners are likely to choose activi-

ties that are most conducive to their personal learning style.

- 4. Integrate student management of learning in the structure of the course. For example, throughout the course include routine opportunities for students to identify learning goals, monitor the progress of those goals, and revise their learning goals. Including opportunities for management of student learning throughout the course enables students to routinely self-assess their knowledge acquisition. Additionally, it helps students monitor their short and long term learning goals.
- 5. Include rubrics for assessment of student work. Providing rubrics before students begin to work on their assignments, informs them of the criteria used to assess their work. They also offer students a guide as they complete assignments.
- 6. Include a model or example of typical discussion responses and final products. The inclusion of models also helps guide students. This is particularly helpful when teachers and students cannot meet synchronously as it provides a clear example of the teachers' expectations. Models also show students the possible extent (depth and breadth) that their assignment should entail.
- 7. Create authentic learning experiences for students. For example, in a history course, teachers could require students to personally identify with historical events (e.g., journaling as if they experienced history first hand, assuming persona of a historical figure, document analysis and creation of similar document as it relates to their present day life). Engaging in personally relevant assignments connects students to course content. Additionally, students will engage in higher order thinking through the synthesis, analysis, and other learning activities required for completion of an authentic learning assignment.
- 8. Have fun with student introductions at the start of the course. For example, students could play a game of tag where everyone introduces himself or herself and tags a classmate by asking them a ques-

tion. A "fun" introduction initially introduces everyone to his or her classmates and teacher. It also introduces students to the discussion board feature, allowing them to practice using it prior to full course discussions. Furthermore, an introductory assignment could ease tension or anxiety about the course because it brings all students to one level since success in the activity is not contingent upon content knowledge.

- 9. Consider the power of social networking. Social networking sites such as ePals (http://www.epals. com), Ning (www.ning.com), and Facebook (www.facebook.com) have great potential to decrease isolation and encourage collaboration in the K-12 online learning environment.
- 10. Ensure students are aware of the technology requirements needed for success in the course. It is important for students (and parents or guardians) to know the basic hardware and software they should have. Additionally, Internet connection (and speed of connection) is also an area that should be addressed prior to enrolling in the online course.

The "best practices" presented in this article offer key recommendations toward enhancing learning for online high school students. It is necessary to encourage teachers and students to maximally use the tools afforded to them. This task requires teachers to take a deliberate, proactive approach in the design, development and implementation of their courses. It also encourages teachers to promote and create opportunities for student interaction. Adhering to the recommendations provided, offer one step toward ensuring all online students receive a quality educational experience.

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References

- Chyung, S. Y., (2001). Systematic and systemic approaches to reducing attrition rates in online higher education. *The American Journal of Distance Education*, 15(3), 36-49.
- Clark, R. C. & Mayer, R. E. (2003). *E-Learning and the science of instruction: Proven* guidelines for consumers and designers of multimedia learning. New York: John Wiley.
- Dow, M. J. (2008). Implications of Social Presence for Online Learning: A Case Study of MLS Students. *Journal of Education for Library and Information Science*, 49(4), 231-42.
- Duphorne, P. & Gunawardena, C. (2005). The effect of three computer conferencing designs on critical thinking skills of nursing students. *The American Journal of Distance Education, 19*(1), 37-50.
- Kerr, S. (2009). Online learning in high schools: Pedagogy, preferences, and practices of three online teachers. In G. Siemens & C. Fulford (Eds.), Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2009 (pp. 2871-2878). Chesapeake, VA: AACE.
- Mason, C. L. & Berson, M. J. (2000). Computer mediated communication in elementary social studies methods: An examination of students' perceptions and perspectives. *Theory and Research in Social Education*, 28(4), 527-545.
- Park. J. & Choi, H. J. (2009). Factors Influencing Adult Learners' Decision to Drop Out or Persist in Online Learning. *Journal* of Educational Technology & Society, 12(4), 207-17.
- Roblyer, M. D., (1999). Is choice important in distance learning? A study of student motives for taking internet based courses at the high school and community college levels. *Journal of*
- Research on Computing in Education, 32(1), 157-171.
- Sankarn, S. R. & Bui, T. (2001). Impact of learning strategies and motivation on performance: A study in Web-based instruction. *Journal of Instructional Psychology*, 28(3), 191-198.
- Yang, Y., Yeh, H., & Wong, W. (2010). The influence of social interaction on meaning construction in a virtual community. *BritishJournal of Educational Technology* 41(2), 287-306.





Every picture tells a story. Some just tell it with more detail than others.

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