

**PERCEIVING AN ONLINE ADVANTAGE: REFLECTIONS ON THE SPEAK  
UP SURVEY**

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### **Abstract:**

A review of the responses of Michigan's aspiring teachers to a 2009 national survey demonstrate a general comfort with the use of technology in the classroom that is on a par nationally with their surveyed peers. Their university instructors appear to be making more use of podcasts and other digital resources in their training. The reviewers, both Teacher Education faculty members, note that certain online tools such as social bookmarking and collaborative writing tools seem to not have taken hold with our aspiring teachers. Additionally, the reviewers note some weaknesses in the survey design which limited the ability to have many specific conclusions about technology use among aspiring teachers.

## Introduction

Speak Up is an annual research initiative of Project Tomorrow, a national education nonprofit group whose vision is to “ensure that today’s students are well prepared to be tomorrow’s innovators, leaders and engaged citizens of the world” (<http://www.tomorrow.org/about/about.html>). In 2009, Project Speak Up “surveyed 299,677 K-12 students, 26,312 parents, 38,642 teachers, and 3,947 administrators representing 5,757 schools and 1,215 districts including public (97%) and private (3%) schools” (Project Tomorrow, 2010, p. 2). Included in the survey were 1,987 pre-service teacher candidates in teacher preparation programs which the survey refers to, as a group, as *aspiring teachers*. Of the 1,987 aspiring teachers from 71 schools of education surveyed nationally, 121 were from Michigan. This represents 6% of the sample which, based on general state population, was a strong showing for Michigan’s aspiring teachers.

The purpose of this article is to disseminate Speak Up data regarding how Michigan aspiring teachers see themselves as individuals and future teachers using technology and discuss how prepared they feel they will be to use educational technology in the classroom as compared to their peers in the nation. We will also discuss how this data can influence teacher preparation programs in Michigan.

It is important to note that we did not have access to the raw data from the survey. Nonetheless, despite not having such access, we were able to make some noteworthy observations about our teaching practices based upon a comparison between aspiring teachers in Michigan and general national trends.

## Access

One concern teacher educators share is that aspiring teachers may not have sufficient access to technological tools that their peers in other states may have (Goode, 2010). According to the SpeakUp survey, Michigan’s aspiring teachers appear to be on an equal footing with their peers nationally regarding access to technological tools for their own use. In fact, Michigan aspiring teachers report 8% above the national rate in having access to video game devices. They rate 7% above the nation in having access to desktop computers and 3% above in access to laptop computers. The design of the questions leave it unclear as to whether aspiring teachers lack any computers of their own, but the data suggest that many own both a desktop computer as well as a laptop.

## Expertise

Although Michigan’s aspiring teachers report that slightly more of them are beginning users of technology, this might be a problem with self reporting. Some aspiring teachers see themselves as expert users of computer applications until they actually take a course in educational technology (Aiken & West, 1990) after which time they may downgrade their level of self reported expertise. Consequently, the accuracy of this reflection may be confounded by the point at which they participate in the Speak Up survey in the course of their teacher education program. A greater

number of them reporting that they are at the “beginning” level may not necessarily be portraying an accurate reflection of their skill sets.

### **Web 2.0 Tools**

Our aspiring teachers do not seem to be too different from their national peers in the use of Web 2.0 tools such as in the act of communicating with others online and downloading videos and other media. They fall a little behind in the numbers of those reporting that they have made videos or modified them to create “mash ups; 12% of Michigan responses versus 18% of national responses.” What is more disconcerting is the small number (9%) of Michigan aspiring teachers who report using social bookmarking tools such as ‘delicious’, ‘digg’, or ‘diigo’ which enable them to store, organize, search, and manage bookmarks of web pages. Use nationally is not much better (16%). These numbers may suggest that there is a general omission in general teacher training although there is no evidence from this survey to warrant such a conclusion. Research by Farwell & Waters (2010) indicates that “given the significant amount of students unaware of social bookmarking, it can be assumed that some educators are also unaware of the topic (p.8).” There may just as likely be some feature of the social bookmarking tools that education students or technology-users generally do not find appealing or relevant. The perceived relevance of certain technologies may be based on a perception of their impact on their future teaching needs.

This discussion serves as a reminder that the Speak Up survey summary does not provide much insight into why a student may not use a certain tool since we are not privy to the grade level or subject area the student hopes to teach and knowing that information might provide better insights. Overall, the particular tool aspiring teachers use is of less importance than their general understanding that such a tool exists. In this case, social bookmarking applications to store, annotate, and share research gleanings with other professionals have been introduced in educational technology courses (Wetzel, Foulger, & Williams, 2009) in some programs although it is not clear how widely or thoroughly.

Next to their peers, Michigan aspiring teachers also seem disinterested in using applications that notify them of news, articles, or changes to web sites. Close to a third (35%) of national respondents and a little over a quarter (27%) of Michigan respondents use web tools that notify them about such things as news, magazine articles or changes to web sites.

### **Collaborative Writing**

In addition to a marked lack of interest in contributing to wikis, aspiring teachers locally (19%) and nationally (22%) seem to not be interested in using or learning to use collaborative writing tools such as Google Docs or Buzzword even though classroom teachers are reporting (Borja, 2006; Parker & Chao, 2007) using collaborative writing tools to connect with their students outside of class and to connect classes with other classes.

### **Online Classes**

Michigan is unique among states in teacher education in that high school students in Michigan, beginning from sixth grade, must complete 30 hours of online education, not just computer based training, in order to graduate. One of the first indications that Michigan's aspiring teachers may be benefiting from the K-12 focus on online education is that our aspiring teachers report their professors are downloading podcasts and using them in their teaching almost 10% more than their peers nationally.

Compared with national numbers (94%), our aspiring teachers (93%) are comfortable communicating with colleagues in an online environment (e-mail, SMS or texting, Instant Messaging) and are just as comfortable interacting in online games as are their peers. However, Michigan aspiring teachers show a slightly greater interest in participating in online communities and report the option of taking an online course more often than their peers nationally. They also appear to be more comfortable with reading online text-based resources (75%) in their teacher training courses than their national peers (67%).

This is encouraging and is supported by almost 5% more responses than peers elsewhere in the country in their appreciation of online and digital resources and using technology to create authentic learning experiences for their students in a 21st century classroom. They also appear to be more enthusiastic about incorporating mobile learning within instruction.

### **Digital Resources**

Aspiring teachers appear to have a great level of comfort concerning the use of digital resources to engage their future students. Our aspiring teachers are 5% more likely than their national peers to consider incorporating digital resources such as podcasts and videocasts into lessons. They are 5% more likely to consider using technology to create authentic learning experiences for their students. Compared with their peers nationally, 4% more would consider incorporating mobile devices within instruction.

### **Conclusion**

Although many of the questions posed of students in the Speak Up survey provide some insights into how students are thinking about the use of technology in their future teaching experiences there is so much more that a diligent college instructor would want to know that the survey cannot answer. For example, when almost 9% more of Michigan's aspiring teachers report viewing podcasts, it would be interesting to know if these were assigned viewing by professors or if their comfort with podcasts led them to investigate them on their own. While 12% of our students report posting to blogs it would be interesting to know if they were on a topic related to teaching. It would be interesting to read responses to more direct questions.

What seems clear is that Michigan's aspiring teachers appear to believe that the effective use of technology is an important aspect of being a good teacher and that our teacher education faculty are comfortable, or becoming comfortable, at using technology to teach. Yet, there is still work to be done. We need more teacher

education faculty and their aspiring teachers to use emerging technologies to support learning and to enable future students to use it to demonstrate learning.

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