Evaluating Digital Stories as Authentic Evidence of Civic-Mindedness
By Tom Hahn, Kristin Norris, and Anne Weiss

Research Question

To what extent are digital stories an effective means to capture authentic evidence of civic-mindedness? This report describes the use and analysis of digital stories created by student participants in a co-curricular service-based scholarship program.

Introduction

This study used both the Civic-Minded Graduate (CMG) Rubric and the Association of American Colleges and Universities (AAC&U) VALUE Rubric for Civic Engagement to examine digital stories for evidence of students’ development of civic-mindedness. Steinberg, Hatcher, and Bringle (2011) defined civic-mindedness as “a person’s inclination or disposition to be knowledgeable of and involved in the community, and to have a commitment to act upon a sense of responsibility as a member of that community” (p.20).

The Civic-Minded Graduate Rubric

The CMG Rubric was designed to assess student narratives for civic-mindedness. The rubric includes five dimensions:

- Civic identity
- Understanding how social issues are addressed in society
- Active participant in society to address social issues
- Collaboration with others across difference
- Benefit of education to address social issues

The current research examined the effectiveness of the CMG Rubric

Key Highlights:

Using the Civic-Minded Graduate and the Association of American Colleges & Universities VALUE Rubric, digital stories created by recipients of co-curricular service-based scholarship programs were analyzed to document authentic evidence of civic-mindedness. The findings indicate that:

- Digital stories are an effective tool to capture evidence of civic learning.
- Students showed high levels of civic identity on both rubrics.
- The research increased understanding of the similarities and differences in terms of how the two rubrics measure civic learning and capture variance in civic-mindedness.

1This rubric was created from the AAC&U VALUE Project. The goal was to develop measurement tools to assess the quality of student work (www.aacu.org). Civic engagement was defined as “working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivations to make that difference. It means promoting the quality of life in a community, through both political and non-political processes”.

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as a tool to measure civic-mindedness. To that end, this study also used the AAC&U VALUE Rubric for Civic Engagement. The simultaneous use of the AAC&U VALUE Rubric served to increase understanding of the dimensions embedded in the CMG Rubric.

**Digital Storytelling**

As human beings, we create and demonstrate knowledge and knowing through stories (Fisher, 1987). We utilize the elements of storytelling (e.g., characters, plot lines, actions, motives, settings) to construct reliable or coherent messages that convey our arguments and experiences with different phenomena. The application of this narrative paradigm has been used by educators as a way for students to express their learning and, therefore, their knowledge. The latest incarnation of this making-meaning approach is through digital stories (http://csl.iupui.edu/teaching-research/assessment-resources/storytelling.shtml). Digital stories offer students the ability to exhibit their knowledge through an audio and visual creation.

Digital storytelling is an innovative reflection technique that has the potential to foster evidence of civic-mindedness. The process of creating a digital story challenges students to critically reflect, organize their ideas and experiences, and results in deeper learning (Gregori-Signes, 2010; Schwartz, 2012; Schank, 1995). “Constructing a digital story inspires students to dig deeper into their subject, to think more complexly about it, and to communicate what they have learned in a more creative way” (Microsoft, 2010). When combined with critical reflection strategies (Mezirow, 1981), there is great potential to deepen student learning while also providing authentic evidence from which to assess student civic-mindedness.

Digital storytelling is now recognized as one way for students to articulate their critical and reflective learning both in curricular and co-curricular settings. Pounsford (2007) found that digital stories could motivate students to pursue deeper learning by making class content less abstract by relating it to personal experiences. Digital stories a) facilitate critical thinking and promote cultivation of skills and attitudes essential to professional practice, b) stimulate empathy while assisting in the development of compassion, accountability and cultural sensitivity, and c) foster transformational learning (Schwartz, 2012).

Storyboarding, a unique and important step in the process, is what makes digital storytelling different than other reflection strategies. It requires students to reflect, process, and consider what they have written in order to identify important words or phrases. Then for each identified word or phrase, students must consider an image that would visually represent the idea they are communicating. This step in the process forces students to consider who they are, how they are shaped by the stories they live, and how they will, in
turn, share their diverse identities (Wright & Ryan, 2010). The final product conveys the student's story in a YouTube video that employs still images, music, and student narration.

The digital stories analyzed in this research were created by students in the Sam H. Jones (SHJ) Community Service Scholarship programs from IUPUI (N=39). SHJ scholars were given the option to complete several activities to fulfill program requirements. Some students opted to create a digital story.

**Methods**

To analyze the digital stories for content indicative of civic-mindedness, a four-person research team was trained to use the CMG and AAC&U Rubrics. An initial review of the digital stories was conducted to categorize them as “Low,” “Medium,” or “High” in terms of evidence of civic-mindedness. Five digital stories from each category were randomly selected for further analysis by the research team, for a total of 15 digital stories. The raters initially made independent ratings for the CMG Rubric and the AAC&U VALUE Rubric for Civic Engagement. Next, the raters convened and again viewed each digital story together, discussed their initial scores, and changed their scores when appropriate (post discussion), rendering a total score (CMG maximum score = 35, AAC&U maximum score = 42) for each digital story.

Several steps were taken to strengthen inter-rater reliability. First, the research team participated in a training session that consisted of a norming activity and an orientation to the rubrics. Second, the viewing order of the digital stories was randomly assigned for each reviewer. Third, each reviewer rated the digital stories on their own and made notes. Lastly, the research team adhered to the practice of having regular discussions throughout the assessment process.

**Results**

The findings (See Table 1) illustrate the extent to which students in SHJ Community Service Scholarship programs demonstrate authentic evidence of civic-mindedness through a digital story. The mean scores and standard deviations of the CMG Rubric and the AAC&U Rubric captured variation in scores. Students were rated highest on civic identity for both rubrics. The inter-rater reliability (intra-class) for the four raters in all dimensions for the CMG Rubric were the following: Civic Identity (.94), Understanding of How Issues are Addressed in Society (.98), Active Participant in Society (.89), Collaboration with Others Across Difference (.91), and Benefit of Education to Address Social Issues (.97). The length of the digital story and type of scholarship program were taken into consideration and found to have no correlation with evidence of civic-mindedness. The average length of the digital story...
stories in this research was 3 minutes and 14 seconds. Digital stories typically range from 2 to 10 minutes in length (Robin, 2014).

**Table 1**
Assessment of Digital Stories

<table>
<thead>
<tr>
<th>Civic-Minded Graduate Rubric</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>High Percentage of Scores 6-7</th>
<th>Medium Percentage of Scores 2-5</th>
<th>Low Percentage of Scores ≤ 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Identity</td>
<td>5.36</td>
<td>1.8</td>
<td>57%</td>
<td>41%</td>
<td>2%</td>
</tr>
<tr>
<td>Benefit of Education to Address Social Issues</td>
<td>4.11</td>
<td>2.54</td>
<td>36%</td>
<td>43%</td>
<td>21%</td>
</tr>
<tr>
<td>Active Participant in Society to Address Social Issues</td>
<td>4.21</td>
<td>1.56</td>
<td>18%</td>
<td>75%</td>
<td>7%</td>
</tr>
<tr>
<td>Collaboration with Others Across Difference</td>
<td>2.86</td>
<td>1.97</td>
<td>9%</td>
<td>59%</td>
<td>32%</td>
</tr>
<tr>
<td>Understanding How Issues are Addressed in Society</td>
<td>2.3</td>
<td>1.89</td>
<td>7%</td>
<td>52%</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Overall (7-point scale)</strong></td>
<td><strong>3.77</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>AAC&amp;U VALUE Rubric for Civic Engagement</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of Scores 6-7</th>
<th>Percentage of Scores 2-5</th>
<th>Percentage of Scores ≤ 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Identity and Commitment</td>
<td>5.02</td>
<td>1.84</td>
<td>50%</td>
<td>36%</td>
<td>7%</td>
</tr>
<tr>
<td>Civic Action and Reflection</td>
<td>3.62</td>
<td>1.37</td>
<td>13%</td>
<td>77%</td>
<td>4%</td>
</tr>
<tr>
<td>Civic Contexts/Structures</td>
<td>3.96</td>
<td>1.42</td>
<td>9%</td>
<td>77%</td>
<td>7%</td>
</tr>
<tr>
<td>Diversity of Communities and Cultures</td>
<td>3.12</td>
<td>1.48</td>
<td>4%</td>
<td>75%</td>
<td>14%</td>
</tr>
<tr>
<td>Civic Communication</td>
<td>1.28</td>
<td>1.65</td>
<td>2%</td>
<td>25%</td>
<td>66%</td>
</tr>
<tr>
<td>Analysis of Knowledge</td>
<td>2.18</td>
<td>1.77</td>
<td>0%</td>
<td>54%</td>
<td>39%</td>
</tr>
<tr>
<td><strong>Overall (7-point scale)</strong></td>
<td><strong>3.20</strong></td>
<td></td>
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</tbody>
</table>

**Discussion**

The high prevalence of civic identity as an element of civic-mindedness could be indicative of several factors. First, digital stories as a means of facilitating reflection fosters creativity and expression of self more than traditional reflection strategies (Gregori-Signes, 2010). Second,
the digital stories were created within a co-curricular context, which tends to focus on personal or identity development as opposed to academic content (e.g., understanding social issues, analysis of knowledge) (Komives & Woodward, 2003). Finally, it is easier for students to focus on themselves and their passion or desires to address societal issues than it is for them to articulate what knowledge, skills, or abilities they possess that would also serve as evidence of their civic-mindedness (e.g., Collaboration with Others Across Difference, Active Participant in Society to Address Social Issues).

Beyond evidence of student learning, this assessment provided an opportunity to examine the similarities and differences in terms of how the CMG Rubric and the AAC&U Rubric measure civic learning and capture variance in student civic-mindedness. There is value in knowing the appropriateness of each rubric. Take for example, “Civic Communication” (AAC&U), which was rated extremely low among the sample (mean = 1.28). Aspects of civic communication are alluded to in the CMG Rubric (Collaboration with Others Across Difference), but the ability to “effectively express, listen, and adapt ideas” is implied and not as clear in the CMG Rubric nor apparent in the digital stories reviewed. Another area of distinction between the two rubrics is greater emphasis on students’ ability to exhibit curiosity, show initiative, and team leadership towards civic action in the AAC&U Rubric. Finally, “Benefit of Education to Address Social Issues” is not addressed in the AAC&U Rubric. CMG also delves deeper into “Understanding How Social Issues Are Addressed in Society”.

In summary, the digital stories gathered from the SHJ Community Service Scholarship programs represented broad evidence of civic-mindedness as shown by each digital story getting at least a rating of 1 (indicative of a novice) for each dimension of the rubrics with the exception of “Civic Communication” (AAC&U). Digital storytelling proved to be an effective means for capturing authentic evidence of civic-mindedness, especially civic identity.

Implications and Future Research

This research has informed the use of digital stories as an innovative assessment technique for co-curricular service experiences. Yet this reflection technique is also used in courses (e.g., Themed Learning Communities, Capstone, and Graduate). Results can be used to inform future program and course development to support student civic-mindedness. For example, faculty and staff can use the information to plan reflection activities and trainings designed around the civic learning outcomes. Additionally, using the CMG Rubric to assess other types of learning products beyond digital stories should be explored (e.g., essays, eportfolios, student narratives).

Future research on digital stories that are created in a curricular setting, specifically in service learning courses is warranted. Comparing students who create digital stories as a
reflection on their experience with students completing a written reflection on their experience will allow for better understanding of both reflection strategies, as well as how they foster civic-mindedness and other constructs.

References


