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Perceptions of Judges toward Rigor of High School Senior Capstone Projects at a Northern RI Charter School

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Paper presented at the 45th annual meeting of the New England Educational Research Organization, April 17-19, 2013, Portsmouth, NH.
Purpose of the Study

Existing studies on the topic of graduation projects focus primarily on the creation and implementation (Singer & Hubbard, 2003; Davidson, 2009; Fisk et al., 1997; Nicolini, 2009; Lorenz, 1999; Shaunessy, 2004; Mayer, 1999). Less research exists on the lasting influence of projects as preparation for postsecondary pursuits (Egelson, Harman, & Bond, 2002; Pennacchia, 2010). Overall, research on academic rigor is largely focused upon increasing course requirements (ACT, 2005; Christie, 2000; Kirst & Venezia, 2006; Peter D. Hart Research Associates, 2005) and not on performance-based assessments such as senior projects. This study sought to identify the opinions of judges as to the rigor of such projects.

Perspectives/Theoretical Framework

Senior projects vary greatly in depth and breadth. Most require work throughout the final year of high school (Beacon, 2009; Fisk et al., 1997; Lorenz, 1999; Nicolini, 2009; Shaunessy, 2004); others involve just a few weeks or months of focused preparation prior to presentation of the project (Davidson, 2009; Singer & Hubbard, 2002), while others, in more of a portfolio review model, look back at work completed throughout a student’s high school career (Darling-Hammond et al., 2002). Some projects have revealed that student choice of topic may result in stronger engagement with the work and significantly better results in terms of performance on the assessment (Ito et al., 2008; Nicolini, 2009; Singer & Hubbard, 2002; Shaunessy, 2004). Ito et al. also point out that, although student choice of topic is key, adults must play a significant role. Also, requirements and
standards vary greatly as there are no national project-based graduation requirements.

The National High School Alliance (2006) describes four key areas of focus, including minimum graduation requirements, high-level coursework content, a wide range of student supports, and alignment of high school requirements with the needs of the workforce and postsecondary education institutions. Wagner (2008) identifies seven skills students need to master to excel in the twenty-first century. These include critical thinking and problem solving skills, the ability to lead and collaborate, demonstrating agility and adaptability, showing initiative and entrepreneurialism, demonstrating effective oral and written communication skills, being able to access and analyze information, and being curious and imaginative. These are key ingredients for any successful senior project experience.

**Methodology**

**Research Questions**

The research questions guiding this study were:

1. What are the perceptions of judges of the extent of rigor of senior projects with respect to the work required to complete the written and technical components of the project, and a formal presentation of the project?

2. Is there a relationship between arts major selected and academic achievement; arts major selected and achievement on senior projects; and academic achievement and achievement on senior projects?

3. Are there differences among judges regarding their perceptions of rigor
based upon the nature of their professional positions?

**Participants**

The study employed a quantitative instrument for participant selection. All members of the population of capstone judges serving in 2010 and 2011 ($N=53$) received survey invitations. Of those, $n=35$ returned completed surveys.

After an analysis of the survey data, a random purposeful sample of judges was invited to participate in one of four semi-structured focus groups. Random purposeful selection of participants within a small population allows for selection within critical groups but provides evidence that the selection process is unbiased (Gall, Gall, & Borg, 2007). Selection was based upon their classification into one of four categories: arts faculty employed by the school ($n=5$), school alumni ($n=20$), educators ($n=7$), and artistic professionals ($n=21$). The researcher selected four participants, who are representative of these groups, to be included in the focus groups. Johnson and Christensen (2008) refer to this as a nested sequential design. The final constitution was four groups of three to four participants each.

**Data Sources**

Data collected included school records (grade point average and performance on capstone assessment), rubric scores, survey data, and focus group transcriptions. Student performance in academic coursework was compared with performance on the capstone assessment. This analysis provided a picture of rigor in the classroom and in the capstone assessment at the subject school. The researcher made initial contact with $N=53$
participants then distributed a web-based survey to all respondents. The researcher collected all data from the survey site and incorporated them into a spreadsheet. Content experts (N=2) reviewed focus group questions prior to the sessions to ensure readability and the clarity of the response format. Focus groups were audio recorded for transcription and analysis and transcripts were sent to all participants for member checking.

**Instrumentation**

**Questionnaire.** To gather the quantitative data, a questionnaire was developed based upon the rubric utilized by judges to evaluate student projects. The rubric contains five evaluation categories, evaluating five aspects of the senior project.

The questionnaire (Appendix A) has four sections: Capstone Dossier/Written Work; Organization, Preparation, and Delivery of the Oral Presentation; Film Production; and Film Post-Production, mirroring the judges’ rubric. Each section includes five questions and utilizes a 4-point Likert-type scale with responses ranging from strongly disagree to strongly agree. In addition, it includes demographic items in order to place the respondents within one of the four focus groups. These demographic items include: Gender, Age, Ethnicity, Level of Education, Occupation, Frequency of Judging at the Subject School, Frequency of Judging Capstone Projects at Other Schools, and Were You Recruited or Did You Volunteer?

A pilot study was conducted with school alumni (n=2) and a capstone teacher from the subject school (n=1) to examine item content, readability, and response format. Content validity of the survey instrument was
supported by the literature (Dietz, 2010; Perna & Thomas, 2009; RIDE, 2005a; RIDE, 2005b) and a content review by the professionals referenced above.

**Focus Groups.** Based upon the findings of the initial survey instrument, as well as a review of the literature, the researcher formulated semi-structured questions (Appendix B). Focus groups were formed of the judges who participated in sessions in 2010, 2011, or both. Judges were invited and assigned to one of four categories: Educators, Artists/Filmmakers, Alumni, and Arts Faculty from the Subject School.

**Data Analysis**

Explanatory Design: Participant Selection Model

![Diagram](Figure 1. Mixed Methods Explanatory Design, Participant Selection Model (Creswell & Plano Clark, 2007))

**Phase One Data Analysis**

In their sequential explanatory model, Creswell and Plano Clark (2007) use qualitative results to build upon the initial quantitative data. During phase one of the quantitative results were analyzed using Statistical Package for the Social Sciences (SPSS, 2010). Descriptive statistics, including frequencies, percent, means, and standard deviations, were used to describe the responses to both components of the first research question. Data analysis of the multi-dimensional survey was performed. Cronbach’s alpha
reliabilities were calculated for the data from sets of common items to determine if means could be generated for the respective sections of the questionnaire. A criterion of .70 was used. Means and standard deviations were reported on all items.

**Phase Two Data Analysis**

For the phase two qualitative data analysis, Interpretive Integration was used to inform the questions for the focus groups (Polit & Beck, 2011). After the $n=4$ focus groups were conducted, the transcripts were read, analyzed using discourse analysis, coded, and categorized.

During this phase, the second research question was answered by an analysis of student data, which included demographics, chosen arts major, academic achievement as measured in cumulative grade point average, and performance on the capstone presentation. Quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS, 2010). ANOVA examined the relationships between the dependent variable (achievement on senior projects) and the independent variable (arts major selected). The research question addressing academic achievement and achievement on senior projects was analyzed using a simple product-moment correlation. Effect size was calculated and significance levels were calculated using the Bonferroni adjustment for item-level analyses.

Analysis of the final research question included data from the initial questionnaire as well as transcript analysis from the focus group sessions. ANOVA examined the relationships between the dependent variable (opinions of rigor) and the independent variable (professional position).
**Interpretation of Entire Analysis**

The explanatory design allows for the quantitative and qualitative data analysis and interpretation. During this phase the researcher began the process of what Tashakkori and Teddlie (1998) and Sandelowski (2000) (as cited in Polit & Beck, 2011) “qualitizing” the quantitative data; that is, using the quantitative data from the research questions to “give life” to patterns that emerge in the analysis. In addition, the “long table” approach was used for transcript analysis (Krueger & Casey, 2009). By using multiple copies of the focus group sessions, the researcher can see trends throughout the transcripts. The final phase of analysis and interpretation provided a more complete picture of the case.

**Integration of Quantitative and Qualitative Data**

This section merges the findings from the quantitative and qualitative phases of data analysis of this mixed methods study. This combined analysis provides the basis for the conclusions to follow. Although the first research question was intended to be answered through the questionnaire as well as by the focus groups, the second question was designed to draw data from the focus groups as well as through the acquisition of performance data at the subject school. The third question was mainly addressed through the questionnaire; however, themes emerged from the focus groups that identified some key differences based upon professional positions. The merged findings are presented by research question.

**Research Question 1a:** What are the perceptions of judges of the extent of rigor of senior capstone film projects at an arts-based northern Rhode Island
charter school with respect to the work required to complete the written and technical (filmmaking) components of the project?

Table 1 provides an overview of the sections of the survey related to the written and filmmaking components of the project from the survey instrument, including means and standard deviations. In addition, corresponding findings from the focus groups are included. Items are ranked in descending order based upon means calculated from the $N=35$ questionnaires.

Table 1

*Integration of Quantitative and Qualitative Data Regarding Research Question 1a*

<table>
<thead>
<tr>
<th>Questionnaire Category</th>
<th>M</th>
<th>SD</th>
<th>Focus Group Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film Post-Production Work</td>
<td>3.10</td>
<td>.45</td>
<td>There was no distinction in focus groups between film production and film post-production</td>
</tr>
<tr>
<td>Written Component</td>
<td>3.09</td>
<td>.44</td>
<td>Significant amount of work required; varying levels of performance across student population</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Need for deeper reflection and more attention paid to later, summative pieces</td>
</tr>
<tr>
<td>Film Production Work</td>
<td>3.08</td>
<td>.48</td>
<td>Level of comfort in discussing this issue varied greatly</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Educators felt that it looked amazing, while arts faculty found it lacking in comparison to writing</td>
</tr>
</tbody>
</table>

*Note.* Data were collected from $N=35$ questionnaires and $N=4$ focus groups. $M =$ mean; $SD =$ standard deviation. Questionnaire items are ranked in descending order by mean.

**Research Question 1b:** What are the perceptions of judges of the extent of rigor of senior capstone film projects at an arts-based northern Rhode Island charter school with respect to the work required to complete the formal presentation of the project?
Table 2 provides an overview of the sections of the survey related to the oral presentation component of the project from the survey instrument, including mean and standard deviation. In addition, corresponding findings from the focus groups are included. While the questionnaire results rated the oral presentation highest, the focus groups felt that the rigorous expectations did not always result in stronger performance from the students.

Table 2

*Integration of Quantitative and Qualitative Data Regarding Research Question 1b*

<table>
<thead>
<tr>
<th>Questionnaire Category</th>
<th>( M )</th>
<th>( SD )</th>
<th>Focus Group Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Presentation</td>
<td>3.16</td>
<td>.50</td>
<td>Arts faculty believe that their students underperform on oral presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Additional preparation should be incorporated throughout the students’ four years of study</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alumni noted the high stakes nature of the event and inadequate preparation may lead to nervousness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The artists and filmmakers provided a mixed impression; one called it “a good piece” while another noted the need for additional public speaking</td>
</tr>
</tbody>
</table>

*Note.* Data were collected from \( N=35 \) questionnaires and \( N=4 \) focus groups. \( M = \) mean; \( SD = \) standard deviation.

**Research Question 2a.** Is there a relationship between arts major selected and academic achievement?

All students at the subject school must select one of three arts majors (Culinary Arts, Theatre Arts, or Visual Arts) at the time of enrollment. Twenty-five percent of their coursework at the school is dedicated to this content area over the course of their studies. Every senior, irrespective of his or her arts major, must complete the school’s senior capstone requirement, in the form of a film project. Table 3 lists the mean GPAs as
well as the performance on the capstone rubric. Results are reported by arts major.

Table 3

Comparison of Overall Grade Point Average with Performance on Capstone Project by Arts Major

<table>
<thead>
<tr>
<th></th>
<th>CUL</th>
<th>THE</th>
<th>VIS</th>
<th>F</th>
<th>P</th>
<th>Summary of Significant Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Grade Point Average (GPA)</td>
<td>$M$</td>
<td>2.59</td>
<td>3.07</td>
<td>2.86</td>
<td>4.64</td>
<td>.01</td>
</tr>
<tr>
<td>Performance on Capstone Project</td>
<td>$SD$</td>
<td>.65</td>
<td>.59</td>
<td>.49</td>
<td></td>
<td>CUL &lt; THE</td>
</tr>
<tr>
<td>$M$</td>
<td>86.36</td>
<td>89.50</td>
<td>87.47</td>
<td>1.17</td>
<td>.32</td>
<td>NSD$^a$</td>
</tr>
<tr>
<td>$SD$</td>
<td>7.23</td>
<td>7.51</td>
<td>7.93</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. CUL = Culinary Students; THE = Theatre Students; VIS = Visual Students. $^a$No Significant Difference

While there were no significant differences among the arts majors with regard to performance on the capstone project (Culinary students had a mean score of 86.36, Theatre students 89.50, and Visual students 87.47), there was a significant difference between Culinary and Theatre students with regard to overall GPA. The mean overall GPA for Culinary students on a 4.0 scale was 2.59, while the mean for Theatre students was 3.07. The difference is significant at the $p = .01$ level.

**Research Question 2b:** Is there a relationship between arts major selected and achievement on senior projects?

Quantitative analysis, through the use of a correlation of the means of the rubric scores, found no significant differences based on choice of arts major. In addition, corresponding findings from the focus groups are included. Focus groups generally found no relationship between arts major selected and achievement on senior projects, although a few members did feel that
culinary students had a tendency to perform more poorly on the assessment.

Although the differences are not significant, this is supported by the quantitative data. These results are included in Table 4.

Table 4

**Integration of Quantitative and Qualitative Data Regarding Research Question 2b**

<table>
<thead>
<tr>
<th>Category</th>
<th>Arts Major</th>
<th>Focus Group Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance on Capstone Project</td>
<td>CUL</td>
<td>Student films in all three areas are different in theme, but not necessarily in quality</td>
</tr>
<tr>
<td></td>
<td>THE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VIS</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>M</em></td>
<td>86.36</td>
</tr>
<tr>
<td></td>
<td><strong>SD</strong></td>
<td>7.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Data were collected from *N*=35 questionnaires and *N*=4 focus groups. *M* = mean; *SD* = standard deviation; CUL = Culinary Arts; THE = Theatre Arts; VIS = Visual Arts.

**Research Question 3:** Are there differences among judges based upon professional positions?

Table 5 provides mean scores and standard deviations for each component of the project as reported by judge’s occupation. Quantitative analysis, through the use of a correlation of the means of the rubric scores, found no significant differences based on choice of profession of the judges. In addition, corresponding findings from the focus groups are included. Focus group discussion varied based upon the occupations of the members of the group. Although the differences are not significant, they do point to the different perspectives of the groups.
### Table 5

Integration of Quantitative and Qualitative Data Regarding Research Question 3

<table>
<thead>
<tr>
<th>Category by Occupation</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Focus Group Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Students</td>
<td>5</td>
<td>3.08</td>
<td>.18</td>
<td>Alumni were more forgiving in terms of quality, but not of deadlines</td>
</tr>
<tr>
<td>Educators</td>
<td>10</td>
<td>3.18</td>
<td>.35</td>
<td>Arts Faculty had mixed perceptions, but saw more focus on writing than on technical aspects of project</td>
</tr>
<tr>
<td>Artists and Filmmakers</td>
<td>9</td>
<td>2.87</td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>Non-Profit/Government Staff</td>
<td>4</td>
<td>3.30</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Members of the For-Profit Business Sector</td>
<td>6</td>
<td>3.13</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Oral Presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Students</td>
<td>5</td>
<td>3.08</td>
<td>.18</td>
<td>Alumni and Arts Faculty noted and were generally more accepting of student nervousness</td>
</tr>
<tr>
<td>Educators</td>
<td>10</td>
<td>2.98</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>Artists and Filmmakers</td>
<td>9</td>
<td>3.12</td>
<td>.55</td>
<td>All groups called for additional preparation for these students in the area of oral presentation skills</td>
</tr>
<tr>
<td>Non-Profit/Government Staff</td>
<td>4</td>
<td>3.45</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>Members of the For-Profit Business Sector</td>
<td>6</td>
<td>3.23</td>
<td>.50</td>
<td>S</td>
</tr>
<tr>
<td>Film Production Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Students</td>
<td>5</td>
<td>3.12</td>
<td>.27</td>
<td>No differentiation in focus groups between production and post-production</td>
</tr>
<tr>
<td>Educators</td>
<td>10</td>
<td>3.06</td>
<td>.53</td>
<td>Those not familiar with filmmaking techniques tended to be impressed with student work in this area</td>
</tr>
<tr>
<td>Artists and Filmmakers</td>
<td>9</td>
<td>2.89</td>
<td>.33</td>
<td></td>
</tr>
<tr>
<td>Non-Profit/Government Staff</td>
<td>4</td>
<td>3.25</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Members of the For-Profit Business Sector</td>
<td>6</td>
<td>3.27</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Film Post-Production Work</td>
<td>5</td>
<td>3.10</td>
<td>.45</td>
<td>Those with experience with the project or with filmmaking in general tended to be more critical of student performance in this area</td>
</tr>
<tr>
<td>College Students</td>
<td>5</td>
<td>2.92</td>
<td>.29</td>
<td></td>
</tr>
<tr>
<td>Educators</td>
<td>10</td>
<td>3.08</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Artists and Filmmakers</td>
<td>9</td>
<td>2.97</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Non-Profit/Government Staff</td>
<td>4</td>
<td>3.20</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Members of the For-Profit Business Sector</td>
<td>6</td>
<td>3.43</td>
<td>.51</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Data were collected from $N=35$ questionnaires and $N=4$ focus groups. $M =$ mean; $SD =$ standard deviation.
Summary and Discussion of Principal Findings

Postsecondary success often results from a rigorous high school experience, particularly in writing (ACT, 2005; Adelman, 1999b; Barth, 2004; Conley, 2007; Martinez & Klopott, 2005; Menson, Patelis, & Doyle, 2009).

Research Question 1a: What are the perceptions of judges of the extent of rigor of senior capstone film projects at an arts-based northern Rhode Island charter school with respect to the work required to complete the written and technical (filmmaking) components of the project?

1. Quantitative results show that the \( N=35 \) respondents to the questionnaire felt that the written and filmmaking components of the project were rigorous. The dimension-level mean scores of 3.09 (with a standard deviation of .45) for the written component, 3.08 (standard deviation .48) for the film production component, and 3.10 (standard deviation .45) for the post-production work on the film show that the judges felt that these tasks all provided a rigorous experience for students. In fact, no judges strongly disagreed that the filmmaking elements were rigorous, while only \( n=1 \) respondent strongly disagreed that the written work was rigorous.

2. Focus group participants agreed that the rigor of the various components was at an appropriately high level. A member of the artists and filmmakers group noted:

   I think the workload is heavy in a good way. I think it gives them a lot to do and a lot to process and it shows who waited to the last minute... I think adding more work might be too much to handle and any less wouldn’t be enough, so I think it’s in a nice rigor level.

Across groups, they found that the written requirements were rigorous, but that students did not always apply themselves fully to the written
requirements, resulting in a reduction in quality of the final written work. An educator remarked:

I remember going through the students I was seeing that day and thought, ‘I wonder if this is some of their best writing work. I wonder if this is just... I had to check, do that reflection and there it is.’ Sometimes I was left feeling like, for a senior, I’m not sure it was necessarily showing all that they could, some of it seems like it was just being done for the sake of getting it into the portfolio for the project... If this is about showcasing or producing and then having them all go into their best work, I don’t think they were doing their best writing.

With regard to the technical (filmmaking) aspects of the project, many of the judges who had no filmmaking experience were in awe of the final products, while those with experience found that the quality had remained consistent over the years. An alumnus noted: “It reflects how much effort you actually put into it... (T)he equipment is not too technical or hard to use... (If) you’re an average student you’ll probably be able to use it”.

Barron et al. (1998) recommend scaffolding of all elements of a project. In doing so, the subject school might mitigate the differences in quality described by judges.

Research Question 1b: What are the perceptions of judges of the extent of rigor of senior capstone film projects at an arts-based northern Rhode Island charter school with respect to the work required to complete the formal presentation of the project?

3. While the oral presentation component received the highest mean scores on the instrument ($M=3.16, .50 SD$), judges felt that students often underperformed in this area. One member of the arts faculty from the subject school was particularly critical of actual student performance: “...my kids...don’t do so hot with the oral presentation”. Alumni pointed to the nervousness generated by the high stakes nature of the presentation. As
with the filmmaking component, judges’ comments reflected the fact that they felt the requirements were rigorous, but that student performance was not always up to the challenge. Davidson (2009) argues that instruction throughout a school must adequately support students as they prepare for these projects. Courses across the curriculum could provide training in oral presentation skills.

Research Question 2a: Is there a relationship between arts major selected and academic achievement?

4. There is a relationship between arts major and academic achievement based on cumulative GPA. In an examination of data from the classes of 2010 and 2011, theatre students significantly outperformed culinary students throughout their studies. Theatre students have a mean GPA of 3.07, while their culinary counterparts earned a mean GPA of 2.59. The difference is significant at the \( p = .01 \) level. Visual arts students placed in between these two groups (mean GPA: 2.86) with no significant differences with either culinary or theatre students.

Research Question 2b: Is there a relationship between arts major selected and achievement on senior projects?

5. There is no relationship between arts major selected and achievement on senior projects. Quantitatively, the mean scores for performance on the capstone project had no significant differences with culinary at 86.36 (SD 7.23), theatre at 89.50 (SD 7.51), and visual at 87.47 (SD 7.93). In light of the finding in Research Question 2A, this is particularly interesting. While there is a significant difference in overall academic achievement between
theatre students and culinary students, no such difference exists with regard to their performance on the senior capstone project. The project levels the playing field. Some focus group members identified differences among the arts:

Most memorable (films) were in the theatre and the arts and then some didn’t do so well some were culinary. Culinary is more it straightforward, so it’s kind of like their films are straightforward: what they like, their interests into the film.

While most felt that it wasn’t as much a difference in quality as it was in subject matter:

I feel like a lot of times the visual students go for more artistic film with a lot of creative editing. The theatre students will often do something autobiographical and more emotional I feel. And culinary students, I think, go a lot with future goals and they sort of like base it around like here is my story and here is where I am going.

Research Question 2c: Is there a relationship between academic achievement and achievement on senior projects?

6. Students with a high overall GPA tended to have higher performance on the capstone project ($r = .337$, $r^2 = .11$, $p = .001$). This finding demonstrates a positive correlation between academic achievement and achievement on senior projects with a medium effect size. While the project may level the playing field between the arts with regard to academic achievement, higher performing students tended to perform better on this assessment. This is an instance of what the National Commission on the Senior Year (2001) identified as a more rigorous assessment, which helps to ease the transition to postsecondary opportunities. The National High School Alliance (2006a) called for additional supports to ensure student success. These supports would help to increase the chances of all students achieving at high levels.
Research Question 3: Are there differences among judges based upon professional positions?

7. Quantitative analysis showed no significant differences among judges’ scores based upon their professional positions. While artists and filmmakers rated students lowest in three of the four sections of the questionnaire, the difference was not significant. The focus groups, however, differed with regard to how critical they were of various components.

   Educators were more critical of the written work, while alumni were more forgiving of lower quality work. Alumni and arts faculty, those most closely connected to the subject school were more accepting of student nervousness during the oral presentations. The questionnaire categories of film production and post-production were not distinguished during the focus groups. Those less familiar with the skills needed for these tasks were more impressed with student work in this area; those with more knowledge were more critical. The literature supports the use of judges from outside the classroom (Kerka, 2006; Schwebach, 2008), real audiences (Garbus, 2000) and content area experts (Linn, Baker, & Dunbar, 1991; Pfeifer, Sadusky, & Kubic, 2010). Conley (2001) suggests the use of faculty from secondary and postsecondary schools.
References

ACT. (2005). Crisis at the core: Preparing all students for college and work. Iowa City, IA: ACT, Inc.


Appendix A

Questionnaire

The following questions utilize a four-point Likert-type scale to measure responses, ranging from Strongly Disagree to Strongly Agree. Please try to encapsulate your overall judging experience at the school when selecting responses.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Capstone Dossier/Written Work

1. The students’ written work requirements were rigorous. 1 2 3 4
2. The students paid attention to detail in the written work. 1 2 3 4
3. The written work provided insight into the creative process. 1 2 3 4
4. The written work was challenging for the students to complete. 1 2 3 4
5. The written work provides evidence of clear problem solving. 1 2 3 4

Organization, Preparation, and Delivery of the Oral Presentation

6. The students demonstrated extensive preparation for the oral presentation. 1 2 3 4
7. The students maintained a clear focus on the topic during the oral presentation. 1 2 3 4
8. The students dressed formally for the presentation. 1 2 3 4
9. The students spoke clearly, effectively, and confidently. 1 2 3 4
10. The students fully engaged the audience during oral presentation. 1 2 3 4
Film Production

11. The students’ filming requirements were rigorous.  
   1  2  3  4

12. The students used creative and varied camera angles.  
   1  2  3  4

13. The students used lighting effectively.  
   1  2  3  4

14. The students used sound effectively.  
   1  2  3  4

15. The students required significant technical skills to shoot their films.  
   1  2  3  4

Film Post-Production

16. The students’ editing and post-production requirements were rigorous.  
   1  2  3  4

17. The students used editing creatively to communicate meaning.  
   1  2  3  4

18. The students used editing smoothly to minimize distraction.  
   1  2  3  4

19. The students used creative and engaging dialog, voiceover, or sound effects.  
   1  2  3  4

20. The students used innovative titles/credits.  
   1  2  3  4

Demographic Information

Gender       M   F   Age 18-24  25-34  35-44  45-54  55-64  65+

Highest Level of Education _____

a. Less than HS Diploma  
b. HS Diploma  
c. Some Post-Secondary Work  
d. Certificate  
e. Associate’s Degree  
f. Bachelor’s Degree  
g. Some graduate coursework  
h. Master’s Degree  
i. Doctoral Degree
Occupation _____ (Please select one option)
1. College Student
2. Beacon Faculty Member
3. Elementary or Secondary Education
4. Postsecondary Education
5. Professional Artist
6. Non-Profit/Social Service Sector
7. Government Agency
8. Business Community

Are you an alumus of Beacon Charter School?  YES   NO

Frequency of Judging Capstone Projects at Beacon Charter School:
Once    Twice    Three Times    Four Times    Five or more Times

Frequency of Judging Capstone Projects at schools other than Beacon:
Once    Twice    Three Times    Four Times    Five or more Times

Were you actively recruited to be a judge or did you volunteer?
Recruited    Volunteered
Appendix B

Focus Group Questions

There will be four focus groups of four participants each, as follows:

Educators
Artists/Filmmakers
Beacon Alumni
Beacon Arts Faculty

The semi-structured focus groups will address the following questions:

1. What is the level of rigor of the capstone project at Beacon?
2. What is the level of rigor of the written components of the project?
3. What is the level of rigor of the filmmaking components of the project?
4. What is the level of rigor of the oral presentation component of the project?
5. Should the project contain more rigor?
6. Does this project prepare participants for life after high school, be it postsecondary education or employment?
7. Does this project prepare participants for pursuing a path similar to yours?
8. Is there a difference in the quality of the work between arts majors?
9. If so, why do you think that is?
10. How could the project be improved?