Background

The Faculty Survey on Undergraduate Student Scholarship was created by the Students as Scholars Assessment and Program Design Committee (see Appendix A), and administered by the Office of Institutional Research & Assessment. The primary goal of the survey was to ascertain faculty perception about undergraduate research and creative activities, and the impact of the Students as Scholars initiative at the institution. See Appendix B for the instrument.

The Faculty Survey was administered in late October 2016 to all full-time instructional faculty, all faculty who were instructors of record for a Scholarly Inquiry or Research and Scholarship Intensive (RS) designated course, and all individuals who had ever served on the QEP Leadership Council. A link to the online survey was sent to each individual. Of the 1,572 individuals surveyed, 179 completed the survey for a response rate of 11.4%.

Data Analysis and Results

Data were aggregated and frequencies reported for each survey item. The survey did not require individuals to respond to every item, and 20 of the 179 did not complete all items. Percentages for each item are listed with the corresponding frequency in parentheses. Percentages may not add to 100% due to rounding.

Respondent Involvement in Undergraduate Scholarship at Mason

Faculty were asked to identify which activities they have done to support undergraduate scholarship at Mason. Half said that they had taught a research course, and 56% have mentored a research or creative project. Almost half (46.4%) have been involved in some other way (e.g. serving on the QEP Leadership Council). More than half (57%) have done two or more activities (e.g. taught research-related course and mentored a student’s project).

Figure 1. Faculty Involvement in Undergraduate Scholarship

Based on N=179 respondents
Students as Scholars Program Outcomes

Faculty were asked about their perception of the pervasiveness of undergraduate scholarship at Mason, based on the Students as Scholars program outcomes (see Table 1). Participants responded positively overall, reporting “mostly” or “completely” for each of the outcomes. Respondents were the most positive overall about their department’s support for faculty mentoring of undergraduate scholars (47.8% reporting “completely”). There was some uncertainty for most of the items (ranging from 5.7% to 17% “not sure”), a finding, when taken with the open-ended comments, suggests that many of the respondents lacked experience with the initiative.

Figure 2. Faculty Perspectives on Students as Scholars Program Outcomes

Survey respondents were given an opportunity to respond to open-ended items. Comments were analyzed for themes, and are summarized by item below. Faculty comments are included verbatim (in italics) for illustration of the theme.

Item 3: In what ways have undergraduate scholars contributed to your own scholarship? (Table 2)

Survey participants were asked to identify the ways in which undergraduate scholars have contributed to their own scholarship. Of the 118 faculty who responded to this item, the majority offered a range of positive contributions, most frequently citing general assistance with research or lab support (31 mentions), undergraduate contribution to data collection and/or analysis (22 mentions), or contributions to writing for publication or co-authorship (19 mentions).

Scholars have been actively involved in all my sponsored projects and have performed experiments that I would have never had the time to do.
As an OSCAR research assistant, a student has prepped data that I've used to draft two conference presentations and one journal article.

During course work we have created data sets and investigated questions of real concern to the community where we work. The ability of OSCAR to help support this work has been invaluable.

I always have 1-3 UGs in my research lab each year and typically 1 URSP scholar or OSCAR WS RA a year. They are awesome. Have published over 10 peer-reviewed journal articles with UGs as first author and 30 or so national conference presentations with UGs.

Intriguingly, several faculty wrote that students have contributed to the faculty member's own research by offering fresh perspectives or insights into the data or subject, or have helped the faculty member solve problems or clarify questions in their own research. A few respondents wrote that students' projects prompted them to explore new questions and topics, which has led them into new areas of discovery for their own work.

By engaging with issues in the work of a student I mentored in a creative project, I solved problems in my own creative research.

They have helped drive my research forward by performing small research projects that inform larger/broader research goals. They have also brought new ideas to the research.

Every semester a student or two makes an observation of something I had missed in a text, or interprets a line in a way I hadn't considered but which is valid. It doesn't happen often... but when it happens it's always exciting.

My students have pushed me to think and learn about scholarship outside my own discipline. This has led to cross disciplinary collaboration.

I find a lot of synergy between my undergraduate teaching and my own scholarship. The insights we all glean from class discussions and written work often spark my own writing and I think that the back-and-forth of class discussion makes me better at asking questions of my own work.

For Mason faculty who may not be engaged in their own research, mentoring students has contributed to improvements in their own pedagogy or capacity to be a better teacher (14 mentions).

Their scholarly annotations have offered me new ways of thinking about the things I've taught and write about. That said, their work has mostly affected my teaching, not my scholarship.

I am a term faculty member so the contribution has been through learning more about how to teach and involve students in the research process. We've learned what they find challenging, what resonates with them, about helping them understand why they should care and how it can enhance their future success.

Through the research course I teach, I always learn from my students. They introduce me to literature and topics outside my own areas of study. Undergraduate scholars ask good questions and challenge tacit assumptions of the research process.

Some faculty have found that mentoring students has had a negative effect on their own scholarship, because mentoring takes a lot of time, or students are not sufficiently motivated to do the necessary work (9 mentions). While some of these faculty have chosen not to mentor students for this reason, others consider it a worthwhile endeavor; these faculty focus on the development of the student, even when the effort does not benefit the faculty member's own scholarship.
It is important to note that mentoring on average hinders my own scholarship: in the time it takes to train and guide, I could have gotten any one student project done along with at least one or two others. I support undergraduates’ research because it’s good for them not necessarily for me.

I have had a couple publications emerge from work with students - but that is not the norm. Most often, I put in a lot of time without getting much contribution to my own work.

Table 1. In what ways have undergraduate scholars contributed to your own scholarship?

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Assistance/Lab Support</td>
<td>31</td>
</tr>
<tr>
<td>Data Collection and/or Analysis</td>
<td>22</td>
</tr>
<tr>
<td>Students contributed to writing for publication or co-authored a piece</td>
<td>19</td>
</tr>
<tr>
<td>Students offered fresh perspectives or insights, clarified approach to a study, or offered ideas</td>
<td>16</td>
</tr>
<tr>
<td>Students’ own research contributed to a bigger research agenda and/or helped faculty solve problems in their own research</td>
<td>15</td>
</tr>
<tr>
<td>Mentoring students has improved faculty member’s pedagogy or capacity to be a better teacher</td>
<td>14</td>
</tr>
<tr>
<td>Students contributed technical support, such as collecting or organizing resources, literature, or writing script or code</td>
<td>11</td>
</tr>
<tr>
<td>None/Not applicable/No opportunity</td>
<td>20</td>
</tr>
<tr>
<td>Mentoring students has been a hindrance to faculty research</td>
<td>9</td>
</tr>
</tbody>
</table>

Based on N=118 responses

Item 4: From your perspective, to what extent has the Students as Scholars initiative (years 2011-2016) and the Office of Student Scholarship, Creative Activities, and Research (OSCAR) affected Mason’s culture of undergraduate student scholarship? (Table 3)

The 119 responses to this item were overwhelmingly positive, with 46 mentions of “significant” improvement, and 38 mentions of “good” or generally positive impact (see Table 3).

Both SAS and OSCAR have provided a clear framework for students to engage in research and scholarly inquiry. Additionally, the financial incentives have been advantageous to getting buy-in from outside researchers and partners.

SaS and OSCAR have brought student scholarship to the forefront at Mason. I always cite this as one of the few successful university-wide initiatives that Mason has entered into during my tenure, and I hold it out as a model when new initiatives are suggested.

Students as Scholars and OSCAR have totally transformed undergraduate research at Mason. These programs are the best thing to happen at Mason in 20 years.

There were many respondents (22 mentions) who indicated that they could not evaluate whether there has been an impact, because they are too new to Mason or have not had the opportunity to be involved with undergraduate research. Some mentioned that they were unable to comment on the institutional impact, but suggested that they believed that OSCAR/Students as Scholars has made positive contributions.
I appreciate and support the OSCAR office/SAS initiative, but I can’t say I know whether there’s been an impact. This is likely b/c I’m so new to campus and only have the chance to teach an RS course once every two or three years.

I don’t know. I run my lab regardless. This semester one of my students got funding through OSCAR which was nice. I hope OSCAR continues to support the students working in my lab.

I think that OSCAR has raised the profile and perceived value of undergraduate student scholarship significantly across the campus, though my own department has not yet done a lot of work with undergraduate scholars outside of our research methods course sequences. I suspect that is in part because we have a relatively small number of tenure line faculty, and most of us are already advising several PhD and MA students and have sort of maxed out our student scholarship advising in those roles.

A few (8 mentions) had a positive reaction to Students as Scholars, noting that it has perhaps not made its own impact, but has served to enhance what already existed. Of these responses, many faculty highlighted the financial and staff support as important resources that have allowed for the growth of opportunities for students (23 mentions).

I think it has contributed by formalizing these opportunities for students and encouraging students to participate in them.

It helped boost undergraduate research at Mason, and brought more visibility to UG research activities.

My department was already doing good work, but SaS helped us articulate what we were doing and improve.

Some faculty (14 mentions) emphasized the curriculum enhancements as contributing to the success of students and to faculty development.

Our department was awarded a SAS scholarship development grant in 2014. We were able to redesign our curriculum to create a scaffolded approach to teaching students about research -- discovery, inquiry and more recently the beginnings of creation. Our students are more aware of the importance of scholarship and many more of our students are participating OSCAR. Several faculty members are working with OSCAR students on various projects and have been very pleased with the collaboration. All of this combines to integrate scholarship into the culture of our Mason. It isn’t just a side project or an add on, it is part of who we are and what we do. It is the norm now, not the exception. It used to be that scholarship was more reserved for grad students or the most advanced undergraduate, but now all undergraduates are able to participate and benefit from a specific focus on scholarship.

A few faculty (12 mentions) have noticed changes in faculty perspective about the ability of undergraduates to do research and creative work.

I believe the Students as Scholars initiative has helped faculty and others see that undergraduate students are capable of being engaged in research. It has changed my perspective on what we can expect students do in our classes that are cross-listed with graduate courses. I used to believe that the undergrads would not be as successful with assignments that involved research. I have watched my son, who is an undergraduate student, produce research papers and projects and have been amazed by what he is able to do because of the courses he has taken that have emphasized research.

I think it has been helpful to have staff members dedicated to creating/supporting a culture of student scholarship. Their workshops help get faculty thinking about our role, the potential to engage students more in research, and how to be effective mentors. It has helped us to refocus on undergraduate learning. It has encouraged faculty to think of Mason students as capable of doing so much more than they may have previously imagined.
The few respondents who were critical of Students as Scholars perceived that the initiative has only helped those who have been involved, or that it has created barriers for their own work with students. Faculty may also see barriers in terms of recognition and reward for mentoring undergraduate scholars.

*I have seen no substantial difference in my own classes. We have always incorporated student research projects in my dept. Now what I do just seems to have more layers of bureaucracy around it, which is not an improvement.*

*There is resistance at the department level and the annual evaluation committees do not know how to take that into account. It requires numerous hours that are not accounted for in the faculty handbook as criteria to consider it.*

Examples of general kudos for the initiative in response to this question:

*Faculty in my department have become increasingly aware of the research opportunities available to students and worked to connect our existing research methods coursework to the annual spotlights on scholarship and other venues for student presentation. The availability of research funds encourages faculty members to take on the otherwise uncompensated work of independent studies, although it would be helpful if more faculty members had a clear understanding of the process of applying for such funds.*

*I think it is great for the students, through OSCAR students get an opportunity to get involved with real research. I have seen students go on to do great things, while they credited the time they spent doing research in my lab as the main part of their education that prepared them for graduate school or a job.*

*I think the initiative has had a dramatic effect on raising the awareness of our students about research as well as facilitating the research itself. Furthermore by promoting and funding travel to conferences the initiative has both stimulated undergraduate involvement as well helping our students get into prestigious graduate programs. I believe we now have a very vibrant undergraduate research culture largely due to this initiative.*

*In five years, this initiative has taken root, grown, and produced amazing fruit. Undergraduate research is almost a taken for granted opportunity. I think the work of OSCAR in creating multiple entry points for students and faculty is brilliant. The work study initiative is creative and resourceful. Winning a national award helps bring prominence to the great work at Mason, but even without the award, I think we have created a culture of undergraduate student scholarship. The work is not over, however. With new students and new faculty, we need to find ways to sustain this effort.*

**Table 2.** From your perspective, to what extent has the Students as Scholars initiative (years 2011-2016) and the Office of Student Scholarship, Creative Activities, and Research (OSCAR) affected Mason’s culture of undergraduate student scholarship?

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The culture has been significantly changed or transformed</td>
<td>46</td>
</tr>
<tr>
<td>The impact of the initiative has been generally good</td>
<td>38</td>
</tr>
<tr>
<td>The initiative has enhanced what already existed</td>
<td>8</td>
</tr>
<tr>
<td>The initiative has had no impact or a negative impact</td>
<td>5</td>
</tr>
<tr>
<td>Not sure/don’t know/new to Mason</td>
<td>22</td>
</tr>
</tbody>
</table>

Based on N=119 responses
Item 5: Additional comments, suggestions, or concerns (optional)

Forty respondents provided additional comments, suggestions, or concerns. The responses did not reveal clear themes, but can be summarized as follows:

- OSCAR has provided important resources and programs to support undergraduate research activity, including student travel funding, mentor awards, and support for curriculum development. Its efforts are appreciated by many faculty.
- OSCAR needs improved messaging and simpler processes. Several respondents noted that the website and/or the paperwork needed to propose a course or nominate a student for an award are complicated or confusing.
- Several respondents raised concerns about the expectation for faculty to mentor undergraduate students, primarily that there are not enough faculty to meet student demand, and there is little recognition or reward for the time-consuming labor of mentoring undergraduate students.
- Some respondents emphasized the need for resources in other areas, including graduate student research and recognition for the mentoring work that graduate students do. There were a few concerns that OSCAR focuses too much on STEM fields and not enough in the Humanities disciplines.
- Several responses raised complaints or suggestions for what OSCAR should be doing that suggested a misunderstanding about or inexperience with the programs and resources that OSCAR provides. This perhaps suggests a need for a revised communication strategy for educating faculty across the institution.

Follow-up Actions

This report and the anonymous data set will be shared with the program leadership for more in-depth review. Survey results will be used for program improvement and reporting.
APPENDIX A

Students as Scholars Assessment and Program Design Committee Members

This committee is charged with participating in the assessment activities of the Students as Scholars initiative; determining the structure and use of surveys and other tools; promoting the use of the Students as Scholars Master Rubric as a tool for both faculty development and assessment; and advising the other committees and Leadership Council on assessment related to this initiative.

Stephanie Foster (Chair)
Associate Director, Office of Institutional Research & Assessment

Kathleen Alligood
Professor, Mathematics

Heather Anderson
Director of Academic Affairs and Advising, Honors College

Arie Croitoru
Associate Professor, Geography and Geoinformation Science, College of Science

Emily Ihara
Associate Professor/Director, BSW Program, Social Work

Susan Lawrence
Director, Writing Center, and English Faculty

Laura Lukes
Assistant Director, Center for Teaching and Faculty Excellence

Jessica Matthews
Acting Director of Composition and English Faculty

Patricia West
Head, Gateway & Teaching Learning Services, Johnson Center Library, University Libraries
APPENDIX B

George Mason University
2016 Faculty Survey on Undergraduate Student Scholarship

In 2010, the Mason community adopted Students as Scholars, a university-wide initiative to improve student success through increased participation in and celebration of undergraduate research and creative activities. Students as Scholars supports individual opportunities for undergraduate scholarship, and works with faculty to promote the development of inquiry-guided and research curriculum across disciplines and programs.

We want to hear from faculty about how (or if) these efforts have made a difference for you, your students, and/or the university. We hope that you will take a few minutes to complete this brief survey. The results will be used by the Students as Scholars QEP Leadership Council to enhance undergraduate scholarship at Mason in the future. The results will also be used for the SACSCOC* Fifth Year report in the spring.

This survey is anonymous, and the results will be reported in aggregate. Your honest responses will help shape the future of undergraduate scholarship at Mason. Undergraduate research and creative projects are only successful because of the commitment and enthusiasm of faculty and staff.

Thank you! If you have questions about this survey, please contact Stephanie (Hazel) Foster in the Office of Institutional Research and Assessment at sfoste21@gmu.edu or by phone at 703.993.5106.

* This initiative is Mason’s Quality Enhancement Plan (QEP), as required by the institution’s accreditation agency, Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).
At Mason, we define undergraduate student scholarship as the process of undergraduate students producing and sharing original or authentic research or creative works within a scholarly field or discipline.

1. What has been your involvement with undergraduate scholarship at Mason? Select all that apply.

- I have taught a research-related course
- I have mentored a student’s research or creative project
- I have mentored an OSCAR Federal Work-Study Research Assistant
- I have been involved in undergraduate scholarship in some other way
- Not applicable

2. Students as Scholars Program Outcomes:
The following outcomes are used to determine Mason’s success in fostering a culture of student scholarship. From your perspective, to what extent is undergraduate student scholarship pervasive at Mason?

<table>
<thead>
<tr>
<th></th>
<th>Completely</th>
<th>Mostly</th>
<th>Somewhat</th>
<th>Not at all</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Mason's undergraduate students have opportunities to communicate the results of their research or creative activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Undergraduate students who participate in student scholarship are prepared for their career goal and/or advanced study.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Mason's undergraduate degree programs offer opportunities for scholarly inquiry, creative activities, and/or research.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>d. Mason's faculty support undergraduate students in scholarly inquiry, creative activities, and/or research.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. My department or program supports faculty mentoring of undergraduate scholars.</td>
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</table>

3. In what ways have undergraduate scholars contributed to your own scholarship?

Comments:

4. From your perspective, to what extent has the Students as Scholars initiative (years 2011-2016) and the Office of Student Scholarship, Creative Activities, and Research (OSCAR) affected Mason’s culture of undergraduate student scholarship?

Comments:

5. Additional comments, suggestions, or concerns (optional)

Comments: