BRENNA M. BUTLER
JENNIFER ANN MORROW
HANNAH I. SOBLO
KIRSTEN F. BENSON
University of Tennessee, Knoxville

Enhancing International Graduate Students' Written and Oral Communication: A Discussion of Their Perceived Needs and Pedagogical Recommendations

Competency in written and oral communication is viewed as important for graduate students to be competitive in academic and non-academic careers; however, writing and speaking support provided by graduate institutions is often limited. International graduate students (IGSs) in particular face challenges in disciplinary communication and research collaboration. To investigate the challenges IGSs face and inform pedagogical changes, a needs assessment was conducted at a large U.S. public institution. An anonymous online survey designed to measure IGSs' perceptions of their current written and oral communication abilities, needs, and behaviors revealed that activities involving partnership with faculty or peers, such as grant writing, were particularly challenging to IGSs. We argue that collaboration with other graduate students and faculty plays a key role in advancing the skill sets of IGSs, and we provide several suggestions to graduate instructors and program coordinators on how to encourage IGSs' participation in such activities.

Introduction

One of the main objectives of any graduate program is to enhance students' career- and workplace-related skills in order to ensure their future success as scholars, practitioners, and educators. It is important for graduate schools to foster students' communication abilities, such as scholarly writing and presentation skills. Competency in these areas is viewed as distinctly important in order for students to be competitive in academic and non-academic careers (Bridgstock, 2009; Jackson, 2009; Robles, 2012). However, graduate research writing in particular is often overlooked as a required training for graduate students in United States institutions (Badenhorst, Moloney, Rosales, Dyer, & Ru, 2015). For example, doctoral student interviews regarding their writing experiences indicated that students' advisors often perceive writing as "common sense" (Starke-Meyerring, 2011); thus, little to no targeted writing instruction is often provided to students. Additionally, many students report feeling unsure about how to communicate through their writing because they learn more through trial and error processes rather than formal writing educational experiences (Maringe & Jenkins, 2015; Starke-Meyerring, 2011). This inconsistency between the importance of possessing strong communication traits and graduate students' needs or weaknesses in these areas places a responsibility on graduate institutions to be more intentional in better preparing graduate students with effective communication skills training to support their scholarly and career pursuits.

This gap between the level of written and oral communication skills needed to obtain employment and graduate students' possession of these skills is often more apparent within the United States' international graduate student

population (Badenhorst et al., 2015; Druschke et al., 2018). Although this gap has not been widely researched, it is evident in international graduate students' self-perception ratings of their English proficiency, which are often lower than those of the average graduate student (Xu, 1991). International graduate students may face additional difficulty with their written and oral communication abilities due to their need to learn the conventions and style of English used in the United States. For example, international graduate students often struggle with their professors' expectations, which usually include writing in a more direct manner than the writing styles expressed in their home countries (Wu, Garza, & Guzman, 2015). However, international graduate students' English writing abilities have been found to significantly predict their academic performance (Li, Chen, & Duanmu, 2010; Stephen, Welman, & Jordaan, 2004). This highlights the importance of identifying and addressing the writing needs of international graduate students early in their graduate career.

As suggested by Bridgstock (2009), written and oral communication skills are critical for career success, but graduate students are often weak in these areas and have little access to support (Badenhorst et al., 2015). The extent of the gap between students' learning needs and support has been addressed recently at the undergraduate level ("Survey of American," 2018), but not at the graduate level, and particularly not for international graduate students, who face additional challenges to succeed in these skills (Wu et al., 2015). Therefore, the purpose of this study is to a) measure international graduate students' perceptions of their current scholarly written and oral communication abilities, b) assess international graduate students' perceived needs related to these vital skill sets, and c) assess students' scholarly written and oral communication behaviors in their graduate studies. To meet this goal, the researchers conducted a needs assessment of the international graduate student population at a large U.S. public institution. The results of this study can aid graduate instructors of international students and graduate program coordinators at other universities in evaluating their current support and coursework offered for international graduate students to determine their effectiveness in providing Academic English communication training. Recommendations to instructors and program coordinators of international students for potential interventions to strengthen the written and oral communication abilities of graduate students and thus broaden the inclusive nature of English instruction are also discussed.

International Graduate Students' Written and Oral Communication Needs

International graduate students (IGSs) experience all of the standard challenges of completing graduate-level work—plus the added challenge of learning and writing in a second or additional language (Casanave, 2019; Li, 2006a; 2006b). In particular, they face the challenges of learning to create a disciplinary identity that requires them to write and communicate using new or unfamiliar genre and rhetorical conventions and to develop productive relationships with mentors. Such challenges are compounded and sometimes negatively impacted (Schneider & Fujishima, 1995) by the fact that some of these students are also in the process of learning an additional language.

An additional challenge for IGSs can be negotiating collaborative partnerships with peers and colleagues. Challenges in collaboration may derive from the varying expectations of individuals from different professional backgrounds but can also be compounded by linguistic discrimination (Liu, 2010; Rhee, 2010). For instance, some writers might be expected to perform as if they are more proficient in their multilingualism than they actually are – in other words, be expected to code switch, perhaps artificially, when writing professional genres (Kang, 2010; Rhee, 2010). Taken together, studies of IGSs navigating various significant challenges of written and oral communication at the university level indicate that this is an important area for research.

Graduate Student Training in Scholarly Written and Oral Communication Skills

Academic writing at the graduate level is daunting for both native and non-native English speakers (Li, 2007; Ravari & Tan, 2019), yet writing support provided by graduate institutions is often limited (Chittum & Bryant, 2014), especially for IGSs (Sidman-Taveau & Karathanos-Aquilar, 2015). IGSs can get support for their writing from university-sponsored writing centers that provide one-on-one feedback on writing assignments that has been shown to be valuable and effective for IGSs (Ferris, 2003; Leki, 2006). However, some writing centers are more geared towards undergraduate students or provide limited services for the larger writing projects that graduate students typically write (i.e., theses and dissertations). International graduate students in particular frequently express that

they struggle with academic writing (Andrade, 2006; Lin & Scherz, 2014; Singh, 2016); however, many universities still struggle to assist them effectively with this task. What else can graduate instructors of international students and graduate program coordinators offer for resources and support to ensure that their graduate students become successful scholarly writers and don't lag behind their native English-speaking peers?

Purpose of the Study

Overall, the reviewed literature consists primarily of qualitative studies of the academic and career-focused written and oral communication needs of IGSs. The current study adds a quantitative data pool to the existing research in order to provide additional insight into the challenges faced by and the needs of IGSs. This information will he of value to instructors and graduate program coordinators to further inform their pedagogy and development of support resources related to IGSs.

Research Questions

Three research questions were investigated in the current study:

RQ 1) *What are international graduate students' perceptions of their current career-related written and oral communication abilities?*

RQ 2) *What are international graduate students' perceived scholarly written and oral communication needs?*

RQ 3) *What are the reported written and oral communication behaviors of international graduate students?*

Method

Sample Location and Participants

The location for this study was a large public university that offers over 200 master's and doctoral programs, along with numerous graduate certificates that served approximately 6,000 graduate students and approximately 800 international graduate students at the time the study took place in 2018. Overall, 763 international graduate students were recruited to participate in a survey about their written and oral communication needs. For this study, the international graduate student population was defined as a graduate student's country of citizenship being a country other than the United States.

In total, 74 students finished the survey in its entirety, resulting in a 9.7% response rate. The average age of respondents was 29 years old with an average of 13 years of previous English training. Around 37% of respondents had attended an intensive program designed to enhance students' English speaking, comprehension, and listening skills to prepare them for entering into a job or university in the United States ("About CEA," 2019). About 35% of participants reported having taken the Academic English for ESL international graduate students course offered at the institution during their first semester in graduate school. When asked what respondents considered their first or native language, the top responses were Chinese (23%), "other language" (22%; includes all participants that responded with a language reported only 1 or 2 times in the sample), English (12%), and Hindi (10%). The sample was comprised of 26% master's and 74% doctoral students. Females represented the majority of this sample (60%).

Results[1]

IGSs' Career-Related Written and Oral Communication Learning Needs

Six Likert-style questions were presented to students that asked them to rate their current abilities in various tasks on a 5-point scale from *Very Poor* to *Excellent*. Students responded that writing a teaching statement ($M = 2.96$, $SD = .96$) and professional networking ($M = 3.08$, $SD = .89$) were the tasks in which they perceived themselves to have the least ability. Refer to Table 1 for additional information on these questions. Students were asked to rate the likelihood of wanting assistance from others on a set of tasks, using a 4-point scale from *Not at all Likely* to *Very Likely*. They reported being most likely to want assistance with career-related tasks such as presenting at a conference ($M = 2.93$, $SD = 1.01$), followed by job interview preparation ($M = 2.82$, $SD = 1.12$) and preparation for professional networking events ($M = 2.79$, $SD = 1.03$). Table 2 includes additional information on this set of questions.

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[1] All data were cleaned prior to conducting analyses using SPSS 25.

Table 1
Descriptive Table of Perceptions of Written and Oral Communication Abilities

Question	N	M	SD
Finding information about current jobs	74	3.64	0.82
Writing a research statement	74	3.37	0.83
Finding an internship in your field	74	3.30	0.84
Interviewing for a job	74	3.22	0.80
Professional networking	74	3.08	0.89
Writing a teaching statement	74	2.96	0.96

Note. 1 = *Very Poor* to 5 = *Excellent.*

Table 2
Descriptive Table of Written and Oral Communication Needs

Question	N	M	SD
Likelihood of Wanting Assistance with Oral Communication Skills			
Presentations at a conference	74	2.93	1.01
Job interviews	74	2.82	1.12
Professional networking events	73	2.79	1.03
Teaching skills	74	2.65	0.97
Expressing opinions (e.g., disagreements)	74	2.62	0.95
Oral comprehensive exams	74	2.38	1.12
Class participation/discussion	73	2.34	1.04
Listening comprehension	74	2.28	1.14
Likelihood of Wanting Assistance with Academic and Scholarly Writing Tasks			
Articles for publication	61	3.26	0.84
Dissertation/Thesis writing	61	3.26	0.73
Grant writing	55	3.24	0.79
Conference proposals	61	3.00	0.84
Writing presentations	69	2.51	0.87
Course papers	69	2.20	0.99
Correct bibliography format (e.g., APA)	66	2.15	1.07
Likelihood of Wanting Assistance with Career-Related Writing Tasks			
Research statements	69	2.86	0.88
Cover letters	66	2.79	0.92
Teaching statements	57	2.77	0.93
Resumes/CVs	71	2.65	0.90
Professional emails	70	2.39	1.04

Note. 1 = *Not at all Likely* to 4 = *Very Likely.*

These results indicate that IGSs may consider themselves to be lacking in both written and oral skills that are related to their career preparation. Students appear to perceive their ability in non-traditional graduate training, such as social networking, to be their lowest skill sets, indicating a needed area for those who work with IGSs to focus upon. In contrast, IGSs generally rated their perceived abilities in more traditional graduate training topics such as writing a research statement to be higher ($M = 3.37$, $SD = 0.83$), indicating that this is not an area that teachers and program coordinators of IGSs need to focus heavily upon in their instruction.

Instructional Emphasis Needed on Writing Longer Texts

Students were asked about the likelihood of wanting assistance from others during the process of completing particular academic and scholarly writing tasks during their graduate studies. IGSs expressed equally wanting assistance with writing articles for publication ($M = 3.26$, $SD = .84$) and dissertation/thesis writing ($M = 3.26$, $SD = .73$). Another high area of need reported was grant writing ($M = 3.24$, $SD = .79$). These are all typically longer, more complex written works (e.g., 10 pages or more). In contrast, respondents indicated that a smaller-scale task (e.g., less than 10 pages) such as writing in correct bibliographical format (e.g., APA formatting) was an area they were not as likely to want assistance with ($M = 2.15$, $SD = 1.07$). Refer to Table 2 for additional information.

Furthermore, students were asked to report if they have performed several written and oral communication tasks during their graduate studies at the institution. In regards to IGSs' participation in larger writing projects, around 53% of students who responded to the survey reported writing a multi-authored journal article, and only 22% of students reported writing a single-authored journal article during their graduate studies. Only 38% of students reported writing a grant proposal. See Table 3 for additional frequencies of tasks.

Table 3
Percentage of Reported Written and Oral Communication Behaviors

Question	N Checked (Yes)	% Checked
Presenting a project as part of a class requirement	67	90.5%
Literature review	56	75.7%
Research/Project proposal	55	74.3%
Holding a research assistant position	51	68.9%
Abstract for a conference proposal	51	68.9%
Exam essay for a class	50	67.6%
Presenting a project not for a class requirement	42	56.8%
Holding a teaching assistant position	42	56.8%
Critique/Article review	39	52.7%
Presenting at a regional or national conference	39	52.7%
Author on a multi-author article	39	52.7%
Journal article for publication	38	51.4%
Lab report/Experiment report	31	41.9%
Writing a grant proposal	28	37.8%
Technical report	19	25.7%
Author on a single-author article	16	21.6%
Creative writing piece (e.g., poem)	12	16.2%
Holding a teaching associate position	8	10.8%

In summary, these results show that IGSs desire more assistance with academic and scholarly writing tasks that are more time-consuming and are considerably longer (e.g., dissertation/thesis writing) than tasks that require less

writing (e.g., writing tasks less than 10 pages, such as writing a presentation; $M = 2.51$, $SD = .87$). IGSs also reported not being actively involved in larger writing projects, which may indicate that additional training and focus is needed for IGSs in these areas (e.g., writing a grant proposal) in their graduate programs. Additionally, the technical aspect of formatting one's writing, such as writing in correct bibliographical format, appears to be an area in which IGSs feel confident in their skill sets and thus may not need to be a large area of focus for additional training.

Adequate Instructional Emphasis on Traditional Oral Communication Skills

With regards to oral communication skills, listening comprehension ($M = 2.28$; $SD = 1.14$), class participation/discussion ($M = 2.34$; $SD = 1.04$), and oral comprehensive exams ($M = 2.38$; $SD = 1.12$) were the tasks IGSs reported needing the least assistance with. These three tasks are traditional instructional areas for IGSs, as listening, comprehending, and speaking in Academic English are often focused upon in graduate curricula for non-native English speakers (Starke-Meyerring, 2011). These results may indicate that IGSs do not need further assistance or resources provided in these areas, even though the majority of IGSs are presenting in their graduate classes (91%) and utilizing their Academic English listening and speaking skills.

IGSs' Need for "On-Demand" Support Services

Finally, participants were asked to indicate their likelihood of utilizing different formats of support for written and oral communication skills, if offered, from a 3-point scale of *Not Likely* to *Very Likely*. Participants responded that they would be most likely to use both online tutorials ($M = 2.36$, $SD = .75$) and one-on-one writing tutorials/consultations ($M = 2.36$, $SD = .77$) for additional support. The format they reported they were least likely to use was a semester-long course on writing skills ($M = 1.78$, $SD = .80$). For additional information, see Table 4.

Table 4
Descriptive Table of Likelihood of Utilizing Format of Written and Oral Communication Support

Question	N	M	SD
Online tutorials	74	2.36	0.75
One-on-one writing tutorials/consultations	74	2.36	0.77
1-day workshop series	73	2.32	0.72
One-on-one speaking tutorials/consultations	74	2.27	0.83
Short courses (e.g., 1 week) on specific topics	73	2.27	0.71
One-on-one grammar tutorials/consultations	74	2.18	0.90
Semester-long course on speaking skills	74	1.88	0.84
Semester-long course on writing skills	74	1.78	0.80

Note. 1 = *Not at all Likely* to 3 = *Very Likely*.

Overall, these statistics indicate that IGSs prefer "on-demand" training and assistance to support their written and oral communication skills. Such "on-demand" training includes support services that are flexible in both time and length, which appear to be preferable to IGSs as compared to traditional semester-long courses with set meeting times and dates. Students also prefer a format of having one-on-one consultations to receive support, indicating that IGSs desire to receive assistance that is tailored to their personal needs. This suggests that the topics covered in trainings should also be flexible to meet IGSs' unique written and communication needs.

Discussion of Results

In summary, the results from our study highlighted IGSs' needs in a variety of academic writing and oral communication areas that suggest areas to emphasize or change in IGS instruction. Many of these areas of need include job-related speaking and writing needs. One aspect of need highlighted by IGSs was professional networking skills, which were rated low in perception of ability and high in perception of need. This also has been emphasized as

an important area for graduate students to succeed in. For example, Cox (2010) and Kuehne and colleagues (2014) stressed the need for graduate students to engage with and communicate with others. Especially for IGSs, graduate instructors of international students and graduate program coordinators should emphasize training focused on improving IGSs' communication when connecting with colleagues. Such training, such as IGSs practicing their effective professional networking skills, would not only improve their job-related verbal skills in English but may also promote interdisciplinary research with others (Kuehne et al., 2014).

Additionally, many of the needs highlighted by IGSs related to learning field-specific disciplinary conventions that involve a longer writing task (e.g., 10 or more pages), such as writing an article for publication and dissertation/thesis writing. Previous researchers have noted IGSs' difficulty in navigating these writing and speaking tasks (Curry, 2016; Dressen-Hammouda, 2008; Simpson, 2013a). Difficulty in mastering discipline-specific terminology may be a driving factor as to why IGSs in this survey list field-specific writing and speaking tasks as the areas in which they want the most assistance. IGSs indicated that these writing tasks, coupled with the challenge of writing larger works of academic literature, such as dissertation/thesis writing, were difficult for them to accomplish. IGSs' ability to master disciplinary language and knowledge, specifically in longer written works, is an area of need highlighted from this study's results. Greater focus on this area from IGS instructors, such as training on summarizing disciplinary information into a literature review, may help to ensure that IGSs' writing does not lag behind that of their native English-speaking peers' writing.

Of the different formats that IGSs are likely to utilize for written and oral communication support, online tutorials and one-on-one writing tutorials/consultations were reported as the formats most likely to be utilized, according to our survey results. Both formats provide assistance "on-demand." Assistance provided at the specific time when an individual is in most need of it, such as during a student's comprehensive exam period, can be tremendously beneficial to IGSs, as Leki (2006) found. Although our study's results indicated that instructors should provide "on-demand" training to IGSs, there is limited research on the impact of such assistance on students' writing, in addition to how the specific timing of the training affects IGSs' skill sets (Leki, 2006; Storch & Tapper, 2009).

Overall, several areas of need emphasized by IGSs relate to activities that involve collaboration with faculty or peers, such as grant writing, writing a research/project proposal, and practicing for a job interview. As highlighted by Rogers, Zawacki, and Baker (2016) and Tardy (2005), mentors such as an IGS's advisor play a crucial part in the process of mastering academic fluency. Long-term interactions between IGSs and other students and professors have also been shown to improve IGSs' knowledge of their discipline (Riazi, 1997, p. 132), allowing for the IGS to become a stronger Academic English speaker and writer over time. Graduate instructors of international students and graduate program coordinators should emphasize the inclusion of IGSs with other graduate students and faculty within a collaborative writing group, which could play a key role in further advancing the skill sets of IGSs.

Implications and Pedagogical Suggestions

Based on this study's results, it is clear that IGSs struggle with some areas of scholarly written and oral communication and could benefit from additional support. This suggests that graduate instructors of international students and graduate program coordinators should consider the following additions to their curriculum or consider modifying their existing curriculum so that IGSs are able to develop stronger skills in areas of need.

Hold "Mock" Events to Strengthen IGSs Career-Related Communication Skills

Our study's results indicated that IGSs reported wanting assistance with career-related communication skills such as job interviewing and professional networking preparation. This indicates that graduate programs should consider enhancing the instruction of non-traditional communication skills, such as holding "mock" job interviews and "mock" professional networking events for students. These events provide an avenue for IGSs to strengthen their communication skills by combining their conversational English skills with discipline-specific terminology. Instructors of IGSs can take advantage of these "mock" events to emphasize what students can typically expect to occur during professional networking events or during a job interview. Providing insight into the specific aspects of career-related communication skills may increase IGSs' perceptions of their ability to participate in such events.

Instructors and program coordinators should also contact their institution's career services office to inquire if they hold any "mock" interviews or networking events for graduate students. Instructors can encourage IGSs to participate in these services for additional assistance in preparing for career-related events.

Through participating in "mock" career-related events, IGSs may gain the added benefit of connecting with colleagues, such as students and faculty members. For example, through conversations at "mock" conference presentations, IGSs may find commonalities between their research and that of their colleagues' research, which may promote more interdisciplinary research (Kuehne et al., 2014). Thus, through hosting "mock" events, graduate instructors of international students and graduate program coordinators can help to both strengthen IGSs' career-related communication skills along with expanding IGSs' research networks.

Incorporate Related Low-Stakes Assessments into Curricula

Another main finding from our study was that IGSs most commonly wanted assistance with longer, more complex written works (e.g., 10 or more pages). Thus, instruction for IGSs should be geared towards breaking down longer writing tasks into smaller, more "digestible" assignments to make the overall project seem less daunting. One method for instructors to achieve this is to incorporate low-stakes assessments into their course designs that build towards a larger writing project. Low-stakes assessments are methods of assessing students' writing skills without large consequences for the student (Cole & Osterlind, 2008). For example, a low-stakes writing assessment may include the student writing an outline of their paper that the instructor will not grade for its content, but rather provide comments for improving the outline. Scaffolding these writing assignments may decrease the percentage of IGSs that want assistance with larger writing projects, such as course papers that students later submit for publication and other larger writing tasks IGSs are assigned in courses.

Additionally, instructors of IGSs may be able to reach out to their institution's services to provide opportunities for IGSs to gather feedback on their longer writing projects. Some institutions offer dissertation "boot camps," single or multi-day events that allow students to set writing goals, write for extended periods of time, and get advice from support staff (Simpson, 2013b; Starfield & Mort, 2016). Other institutions offer writing groups (Phillips, 2012), and various types of courses or seminars, both for credit and non-credit. Ondrusek (2012) discussed a 10-week seminar offered at UCLA where students were provided the space to "write for publication, not perfection" (p. 185). Students worked in groups and read their writing aloud to provide insight into ways to edit their papers for greater clarity. Other forms of low-stakes feedback that graduate instructors can encourage their IGSs to utilize include writing center-based assistance for IGSs in which graduate students with experience and expertise in various disciplinary fields provide peer support for other graduate students; Gillespie, Heidebrecht, and Lamascus (2008) and Phillips (2016) describe successful versions of such efforts. These services may allow IGSs to gather feedback in a low-stakes environment to improve their writing before submitting their work as part of a high-stakes assessment, such as comprehensive exams, grant proposals, and theses/dissertations.

Partner with Local Organizations to Teach Oral Communication Skills

Our study's findings indicated that traditional oral communication skills, such as speaking and listening comprehension, may not need to receive additional resources in graduate programs, such as money and time, to increase IGS instruction in these areas. Results from this study indicated that IGSs are fairly confident in their abilities in traditional oral communication. Instead, graduate instructors and program coordinators should spend additional resources bolstering IGSs' non-traditional oral communication training, such as presenting at conferences.

Graduate programs lacking in services that focus on these non-traditional communication skills could explore the creation of partnerships with local non-profit organizations that help teach public speaking, such as Toastmasters International groups (https://www.toastmasters.org/). Nordin and Shaari (2017) assessed the effectiveness of Toastmasters meetings for second-language learners' communication abilities and found that the majority considered such meetings to be helpful in terms of gaining experience and confidence with speaking publicly. Another experience that universities could encourage their IGSs to participate in to enhance their oral communication abilities is PechaKucha events (https://www.pechakucha.com/). PechaKucha is an engaging,

efficient method of doing PowerPoint presentations. Students have 400 seconds to present 20 slides on their topic (Morrow, Shipley, & Kelly, 2018). Most major cities have regularly scheduled PechaKucha events, and many college instructors are using PechaKucha within their classroom. Program coordinators that provide IGS instructors additional professional development on how to incorporate these oral communication resources within their classroom may also be beneficial.

Provide Flexibility with Instructional Services

Instructors of IGSs should also consider building in flexibility into the written and oral communication support provided to IGSs. Suggestions for incorporating instruction that is flexible to fit into the time constraints IGSs face include offering written and oral communication services in online formats. Graduate instructors who provide resources to their students on "best practices" in written and oral communication through different medias such as online videos and articles may be beneficial to IGSs. Such resources may be available through an institution's graduate school, or an instructor could utilize teaching assistants to create these learning aids. Additionally, instructors should remain flexible by reserving time slots throughout the week (e.g., extended office hours) for IGSs to meet for one-on-one instruction to review any questions they may have about their writing assignments. Furthermore, instructors can refer IGSs to the writing center at their institution, which can provide additional assistance through one-on-one meetings specifically tailored to IGSs' individual needs.

Conclusions and Future Research

These survey findings support a call to action for graduate instructors of international students and graduate program coordinators to strengthen the scholarly written and oral communication support services provided to IGSs in order to further enhance the quality of education provided to them. Incorporating such practices into graduate education has the potential not only to strengthen IGSs' written and oral communication skills but also to strengthen the skill sets of all graduate students exposed to these modifications.

The results of this study indicated that IGSs have several areas of need that are often overlooked in graduate programs, such as professional networking skills, presenting at a conference, and grant writing skills. These results can help provide insight for graduate instructors of international students and graduate program coordinators into topic areas that are critical to focus on in their own instruction to strengthen IGSs' written and oral communication skill sets that previously may have been perceived as "common sense" (Starke-Meyerring, 2011) and thus not requiring explicit instruction.

Future research should further investigate how specific formats of training (e.g., one-on-one writing consultations) affect graduate students' writing productivity and their confidence in writing. Additionally, it would be useful to better identify the best practices for merging certain skill sets into a program's graduate curriculum, especially those not traditionally taught in graduate courses that IGSs indicate they are likely to want assistance with, such as presenting at a conference. Finally, the long-term effects of the written and oral communication services provided to IGSs merit further investigation. How do recent graduates seeking a job and alumni working in the field for several years utilize their written and oral communication skill sets? Further study in this area may also identify additional areas of training that IGSs require in terms of increasing their written and oral communication proficiencies for greater professional success. Future research into these areas could guide graduate instructors' and graduate program coordinators' decisions about possible new directions to take concerning their pedagogy and development of resources to further strengthen IGSs' written and oral communication skills.

Authors

Brenna M. Butler earned her BS in Psychology from Penn State University. She is currently a Ph.D. student in the Evaluation, Statistics, and Measurement (ESM) program at the University of Tennessee – Knoxville, where she is a graduate research assistant for Dr. Jennifer Ann Morrow, associate professor in the ESM program.

Jennifer Ann Morrow is an Associate Professor in the Evaluation, Statistics, and Measurement (ESM) program at the University of Tennessee - Knoxville. Dr. Morrow's research interests include program evaluation for higher education & health promotion programs, college student development, and teaching research methods & statistics.

Hannah I. Soblo earned her MA from the University of Tennessee – Knoxville with a concentration in Rhetoric, Writing, and Linguistics, and her BA from Clemson University in Writing and Publication Studies. She is currently a Ph.D. student in the Department of English at the University of Tennessee - Knoxville.

Kirsten F. Benson is the director of the Judith Anderson Herbert Writing Center at the University of Tennessee - Knoxville. Dr. Benson teaches courses in qualitative research methods in composition studies, composition pedagogy, public writing, and persuasive writing. Her research focuses include composition studies, writing program administration, and writing center theory and practice.

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