

Talk on the wide side: professional development for wildlife and science filmmakers

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Abstract

Science and wildlife films are very common and widely viewed. Yet, most of the makers of these films have entered the profession because of their knowledge or interest in science and wildlife. Given the potential for a rather circuitous route to the profession many filmmakers benefit tremendously from engagement in professional development. We have detailed the professional development needs of novice and expert science and wildlife filmmakers ranging from keeping current with technology to consideration of engaging audiences beyond the viewing. We have also addressed gaps in the current knowledge of the professional development of these filmmakers and how film festivals may be structured to meet the ongoing educational needs of these professionals.

Keywords

Professionalism, professional development and training in science communication; Science and media; Visual communication

Introduction

Wildlife or science filmmaking endeavors range from one person operations, to small multitasking teams, to large collaborative efforts with multiple stakeholders. Regardless of the composition of the filmmaking crew the goal is to develop a product that will captivate audiences through compelling visual storytelling. The seeming simplicity of such a goal belies the complexity of the knowledge and diversity of skill set necessary for success in a rapidly evolving landscape of media creation and distribution.

Unlike many professions, wildlife and science filmmakers lack a leading professionally aligned organization (e.g., the American Association for the Advancement of Science for scientists) to host annual professional meetings and produce related publications. Coupled with a complex array of evolving trends in societal issues, technological developments, and viewer interests, filmmakers, particularly emerging filmmakers, may find professional development offerings highly beneficial. However, for some filmmakers there are few professional development opportunities that are specifically aligned to their interests and needs.

Within the wildlife and science film genres, film festivals serve many of the functions of a professional development conference. Biennial events such as the

Jackson Hole Wildlife Film Festival (www.jhfestival.org) or Science Media Awards & Summit in the Hub (www.sciencemediasummit.org) include concurrent and plenary sessions that include screenings and panel discussions of new films, technical demonstrations of equipment and processes, presentations on science communication best practices, presentations of practices by successful filmmakers, and informal networking opportunities.

Many of the science and wildlife film festivals have somewhat organically evolved in response to interests and developments in the industry. Although film festival organizers may be aware that filmmakers need professional development, they may not necessarily know what those needs are and how to structure film festivals as events to meet their needs. Thus, those organizing and supporting these events and crafting event programming for industry attendees may benefit from some explicit details of the professional development needs of wildlife and science filmmakers.

The range of knowledge and experience that industry representatives dedicate to and engage in sharing at these festivals suggests that the professional development needs and opportunities of wildlife and science filmmakers is diverse. The experience of filmmakers may range from just breaking into the business to professionals with many years of film making and extensive knowledge and expertise. Through our involvement in and study of film festivals we have gained insight into the procedural, technical, and communication needs of filmmakers. In recognition of the potential professional development needs of filmmakers and the opportunity for festival organizers to integrate professional development elements into the events, we identify and discuss multiple critical directions for professional development for science and wildlife filmmakers. We organized our discussion of the scope of professional development opportunities and needs of science and wildlife filmmakers along facets of need for general professional filmmaking, needs by levels of experience, and needs to address the complexity of the communication of science.

Professional filmmaking

Forming effective teams. Although possible, it is a rather rare event for a single individual to develop a successful wildlife or science film. Taking a film from idea to distribution is a complex process that involves considerable investments of time, resources, and funding. Thus, filmmakers commonly need to work in teams to accomplish their professional goals. However, forming an effective functioning team can be a complicated process, yet, filmmakers tend to follow professional pathways that may not include formal preparation in team building. For example, it is common for filmmakers to consider the profession due to knowledge of and interest in science or wildlife and therefore, may have little or no formal training as filmmakers. The importance, complexity, and increasing understanding of teaming provides justification for providing filmmakers professional development opportunities that increases their understanding of the skills, knowledge and personalities of people that lead to a highly effective team and successful filmmaking.

Finding a story. The process of determining a meaningful focus or story for a science or wildlife film involves more than merely following a passion or idea. The

viable story has to be compelling or appealing to others. While a filmmaker may be committed to an idea for a film, they may suffer from lack of knowledge about ways of determining appeal to others. There are multiple approaches that can be considered for developing an idea that can be transformed into a compelling story [Dunnigan, 2004; Kau, 2004], determining if the story is of interest to others, and identifying the demographics of those interested in the story. The opportunities to determine public appeal of stories is rapidly changing. Filmmakers may determine the viability of or interest in a story by simply talking to others, perhaps posting questions or ideas to social media and examining the responses, or conducting surveys of the public (e.g. using a crowdsourcing site such as Amazon's mechanical turk). Given the array of possible methods for determining the viability of an idea as a story and the evolving nature of societal interest and communication, filmmakers can benefit from professional development that focuses on providing them with ideas for finding a story. Gaining the skills and techniques for determining the appeal of an idea for a film may involve a mixture of public appeal, novelty, and the actual story. Including aspects of determining the market potential for an idea or story prior to starting production is an important focus of professional development.

Use of technology. The advances in technology for film and video continue to provide new opportunities for integrating unique components to films [Ganz and Khatib, 2006; Ohanian and Phillips, 2013; Venkatasawmy, 2012]. The special effects that can be done with desktop video editing, capturing slow events with time-lapse or fast events with high speed cameras, or the creation of 3-dimensional films, all require knowledge of the technology that makes these possible. Thus filmmakers benefit from knowledge of how to use emerging technology, as well as emerging trends in the application and distribution of media content produced with it. Keeping up with technology is a critical professional development need as the technology can enhance their filmmaking process, but also extend the possible ideas or stories that can be told. Exploring the possible uses of technology for filmmaking with other filmmakers in facilitated professional development environments may result in new, unique, or repurposed uses of technology, or lead to the development of new technologies to meet a need. Thus, beyond learning about film producing technology, the professional development may also include opportunities to collectively explore new avenues of filmmaking resulting in the development of new technologies or repurposing of existing technologies and leading to new opportunities for filming.

Collaboration. Beyond the team needed to produce a film, there is great benefit for science and wildlife filmmakers to explore and form collaborations with those outside of the industry. Developing relationships with scientific or wildlife researchers, explorers, those working in government and non-government agencies, community members, and foundations, may lead to unique opportunities, support, or novel stories for filmmaking. Yet, with the nearly endless possibilities for collaborations, there is benefit to knowing what to consider in terms of collaborations. Having some guidelines and learning from the experience of others may save filmmakers time and resources, and lead more quickly to fruitful and satisfying relationships. Thus, there is a need for professional development focused on how to go about identifying potential collaborators, what to expect from the collaborations, warning signs that a collaboration may not be

fruitful or may be very time consuming, and how to effectively manage expectations. Such knowledge could be essential for assuring that filmmakers strategically form collaborations that are meaningful and fruitful.

Story telling. Telling a story is an essential part of filmmakers' professional work. While capturing incredible film footage may be dazzling and mesmerizing for audiences, it is the story that frequently induces a long term effect on viewers. Critical to the production of successful films is knowing how to tell a story in a way that attends to what people want to know, engages audiences in thinking, and leads to audiences taking action. If professionals have been formally prepared as filmmakers they are likely to have been prepared to be effective story tellers. However, many filmmakers tend to come into the profession through more informally formed pathways. Thus, science and wildlife filmmakers are likely to benefit from professional development focused on effective story telling.

In addition to basic story telling knowledge, many science and wildlife filmmakers focus on controversial topics (e.g., evolution, poaching). Understanding how to tell a story that informs and is also a call to action without offending audiences is a challenging and complex process that requires strategic consideration, knowledge of effective story telling techniques, and consideration of the social science behind behavior change. Thus, filmmakers benefit from professional development that enhances their knowledge and skills for effective story telling on a wide range of topics including those that may be perceived as controversial.

Product metrics. Data collection associated with viewers' attitudes and perceptions of movies and television productions is a common practice among large media producers. The producers use the data to determine interest in content, select productions to support (e.g., those films that have potential for high audience interest), and viewer engagement, and then make decisions for future projects based on the data. Although small scale filmmakers could benefit from access to similar data regarding their productions, they are likely to be constrained by resources. In these situations, filmmakers might benefit from an understanding of other data sources that they might use, such as comments on Twitter feeds or other social media communications. Professional development that explores effective and achievable ways to gather data from viewers and how to use the data to make decisions, would be helpful. Data driven decision making may be critical to determining film success, and the viability of future projects.

Rookie filmmakers The professional development needs of rookie filmmakers differ from those with high levels of experience. Given that alternative pathways into filmmaking are relatively common, those new to filmmaking may have some great ideas and be very creative, and yet may need substantial support to become successful filmmakers.

Mentoring. While not frequently considered as professional development, the process of finding and working with a mentor can be critical to the success of a rookie filmmaker. Thus, there is justification for providing those new to filmmaking with professional development that enhances understanding of who

makes a good mentor, what to expect from a mentor, how to work with a mentor, and what to do if a mentoring relationship does not work as anticipated.

Networking. Similar to learning about mentoring, rookie filmmakers benefit from knowledge of how to effectively form a supportive professional network. Given the competitive nature of gaining the support necessary to move an idea to film production, filmmakers' professional networks can be essential critical friends. Thus, professional development that provides guidance for forming a professional network, who should be part of the network, and how to leverage the network for success would be of great benefit to rookie filmmakers.

Production process. Moving from idea to filming is a significant step toward developing a product. However, production typically requires technical and financial support. Gaining the support needed to effectively create and distribute a film can be a complex interplay of marketing, educating, persuasion, and collaboration requiring specific skills and knowledge, which rookie filmmakers need to develop. Thus, rookie filmmakers benefit from professional development focused on engaging in a highly effective and efficient production process.

Rookie and veteran filmmakers

Grant funding. As granting agencies may have different criteria, processes, and expectations for proposal content, submission and review, all filmmakers can benefit from on-going professional development focused on the specifics of developing a winning grant proposal to fund their work. As many science and wildlife filmmakers have a blended agenda with a mix of informing, entertaining, and perhaps a call to action, there are potentially a broad number of possible grant funding opportunities for them to consider. However, the mixed agenda may also be a challenge as many funding agencies may have narrow criteria for proposals that may not align with the broader agenda of science and wildlife filmmakers. Professional development that is aligned with specific funding opportunities and calls from particular funders may provide insight, tips, and perhaps connections that would enhance filmmakers' capacity to develop a proposal that is successfully funded.

Working with producers. Film producers may be individuals but are more commonly organizations (e.g., National Geographic, Discovery Channel). Film producers are a source of funding to support the production of a film and provide support for distribution and advertising. Filmmakers benefit from understanding who within a producing organization is the point of contact and how to effectively determine need for media, direction of interest within the organization, availability of funding, and gaps in their media portfolio. Like granting agencies, producing organizations may approach supporting film production with a wide range of content. Knowledge of the specifics within organizations and the commonalities among organizations may enhance the success of science and wildlife filmmakers gaining support from a film producer. Given the dynamic nature of media and the influence of the ever shifting interests of the public, science and wildlife filmmakers benefit from ongoing professional development that provides them with opportunities to interact with film producer representatives, and learn about their interests and current portfolio needs. Film festivals are the ideal venue for these

kinds of meetings and interactions, which may be part of the formal program or a more organic and implicit part of the events' activities.

New techniques. Filmmakers can find new and creative ways to use technology or combine technology to develop new techniques for filmmaking, editing or distribution. It is possible that individual science and wildlife filmmakers may design new approaches and refine new techniques. However, there is greater possibility for the development and refinement of new filming and processing techniques if professional filmmakers work together to explore possibilities. Given that processes of nature can occur very quickly and very slowly, and the scale of objects being filmed (very small to massive), the techniques used to capture the focus of a film may be unique and require trouble-shooting, exploration, and potentially some experimentation to refine and effectively capture the desired footage. While filmmakers may gather together under their own initiative to discuss techniques, they can benefit tremendously from structured and facilitated discussions, sharing, explorations, and critiques. Such structured opportunities are a potentially very important aspect of the professional development needs of science and wildlife filmmakers.

Exploring new possibilities for films. The exploration of new possibilities is critical to filmmakers' creative and professional success. Thus, science and wildlife filmmakers' success is enhanced by their knowledge of where to seek opportunities for new possibilities, how to identify new and viable avenues for exploration, and how possibilities shift with changes in culture, society, leadership, funding, and interest. Some filmmakers may be able to stay current with new possibilities, however, many are busy with the production and distribution of their films. Maintaining current understanding and awareness of fruitful and futile directions for film development may not be a priority for filmmakers otherwise engaged in more immediate needs of media creation. Therefore, professional development that keeps filmmakers up to date on potential fruitful directions for exploring possibilities is key to their ongoing success.

Communication of science

Controversial topics. Controversial topics explored in films can be both of high interest and high risk in terms of public interest and support for the production. There is a body of research documenting how to effectively communicate controversial issues associated with science and wildlife such as biological evolution, animal conservation, or allocation of natural resources [Friedman, Dunwoody and Rogers, 1999; Kahan, 2015; Kahan et al., 2015; Nisbet and Scheufele, 2009]. The related professional development should explore evidence-based methods to present topics in ways that are provocative and intriguing while minimizing the potential to offend viewers or potentially increase the possibility of a negative public reaction from those who may have interest in a topic. The professional development should increase the filmmakers' knowledge of how to effectively present controversial topics to audiences in ways that decrease reaction and increase positive consideration of film contents. The potential shifting of controversial topics and potential for public reaction suggests that there is a need to continually learn about adjusting approaches to appeal to audiences.

Beyond the film engagement. Motivating viewers to move beyond viewing a film to continued involvement in learning or action is a desire for many filmmakers. Filmmakers may seek to inspire audiences to get involved in a cause, taking action to support ideas such as wildlife conservation, organic food sources, alternative energy, or citizen science projects. Yet, inspiring sustained engagement that is initiated by a film takes planning, access to a range of media (e.g., web interface, social media), perhaps a facilitator or moderator, and marketing to promote and maintain public engagement. Given the dynamic and increasingly diverse ways of recruiting viewers in continued engagement requires knowledge of the options, the benefits and challenges of the options, and the models of success. Thus, there is great benefit for providing professional development that enhances science and wildlife filmmakers' understanding and capacity to engage audiences beyond the film.

Conclusion

The dynamic nature of the tools, processes, organizational structures, and public interest influence the success of science and wildlife filmmakers. However, unlike many other professionals, these filmmakers lack an identifiable organization dedicated to supporting and engaging those in the profession. As a result the wide range of professional development needs are either satisfied rather serendipitously or through engagement in gatherings of professionals at events like film festivals. This places an onus on the organizers of the film festivals to consider professional development strands in their programs, either for specific groups of filmmakers (i.e. rookies, veterans) or for all those attending. If structured properly science and wildlife film festivals may be one of the most engaging and efficient ways for filmmakers to share, learn, be inspired, network, and develop as professionals.

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