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Paul A. Hill

Utah State University, paul.hill@usu.edu

Amanda D. Ali

Utah State University, amanda.ali@usu.edu

Emy A. Swadley

Utah State University, emy.swadley@usu.edu

Russell O. Goodrich

Utah State University, russell.goodrich@usu.edu



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Selecting Appropriate Technology for an Effective Online Extension Course

PAUL A. HILL¹, AMANDA D. ALI¹, EMY A. SWADLEY¹, AND RUSSELL O. GOODRICH¹

AUTHORS: ¹Utah State University.

Abstract. Technology is a strategic asset in accomplishing the land grant mission. Selecting appropriate technology for Extension program management and delivery is essential to achieving planned outcomes, but can be challenging. This article describes the technology platforms selected by a new, legislatively funded Extension program delivering an online course in a hybrid distance-learning experience. The descriptions and application of these technology platforms will assist Extension professionals in choosing technology suitable for delivery and management of their programs as they plan for impact.

INTRODUCTION

Technology is a strategic asset in accomplishing the land-grant mission (Vergot et al., 2004). Selecting appropriate technology for Extension program management and delivery is essential to achieving planned outcomes, but the process can be a challenging one (Arnold, 2018; Sobrero, 2008). The Remote Online Initiative (ROI) program was a legislative response to increasing unemployment in rural Utah communities. Under the ROI program, Utah State University Extension created the Certified Remote Work Professional (CRWP) course in 2018. To ensure program participants were not disadvantaged by geography, the training was designed as an online course to prepare Utah's rural workforce for online opportunities in remote employment. The goal of this specialized training was to teach best practices of remote work so that participants—rural residents—could benefit from remote work opportunities as employees, online freelancers, or e-commerce entrepreneurs.

The CRWP course is a hybrid distance-learning experience consisting of both self-paced and structured components. The self-paced section allows participants to work at their own rate, while the structured portion requires participant attendance in online workshops with program coordinators. The course consists of nine modules, each containing interactive core content, assigned quizzes, and group activities. While participants have the freedom to make their own schedule, program coordinators assist them to ensure they continue to progress throughout the course. Participants are required to complete all course assignments and must earn an average score of 80% or higher to receive a certificate.

The CRWP course coordinators use various technologies to interact with participants (Ronkowitz & Ronkowitz, 2021). They chose these technologies in the hopes of communicating effectively with a class that would never meet face to face.

MESSAGING: SLACK

Slack is a messaging platform that allows for virtual collaboration between students and program coordinators). Program coordinators chose Slack as a communication channel for this course because it is user-friendly, allows for simple organization of shared files, has a simple search function, and has several options for messaging communication.

The organizational features of Slack allow program coordinators and participants to create multiple communication channels, which is convenient for grouping participants by cohort. Course facilitators created several channels to categorize question-and-answer posts on different topics (e.g., #workshop1, #general, or #remote jobs). Such organization helps to streamline communication and reduces the likelihood that participants suffer from information overload.

Additionally, program coordinators aim to respond to Slack messages within one day. This response time helps ensure that participants can work at their own pace and receive information as needed.

The main advantages of utilizing Slack in the CRWP course are (a) the creation of an interactive online community, as course participants benefit from faster response times from program coordinators, (b) integrations with other software (e.g., Zoom, Box, Google Drive, and Outlook), and (c) a less-formal communication method than would be possible with emails, thereby fostering timely communication between participants and program coordinators (Sabin & Olive, 2018).

INTERACTIVE VIDEO CONFERENCING: ZOOM

The CRWP course consists of four mandatory workshops for both course participants and program coordinators. Course coordinators chose to use Zoom, a video conferencing system, to facilitate these interactions. Zoom is a user-friendly software that allows for teleconferencing, audio calls, and webinars. Program coordinators can record these video workshops and store them to a cloud software for easy access. This is an especially-convenient function for participants with learning disabilities who may benefit from access to the class after the fact. Zoom also includes a chat feature that allows participants to post questions, answers, and comments during video conferencing without interrupting the main presenter. The “raise hand” feature is found in the reaction section of the Zoom taskbar and makes it easy for participants to attract their program coordinator’s attention during live sessions. In addition to basic features such as virtual backgrounds and screen sharing, Zoom supports advanced features such as remote assisting, whiteboard functions, waiting rooms, and breakout groups. These features help to improve the overall quality of the course by fostering participant engagement and discussions (Pratiwi et al., 2020). Furthermore, participants become familiar with teleconferencing etiquette and best practices, which may benefit them in future online positions (Kolb, 2014).

CUSTOMER RELATIONSHIP MANAGEMENT: ZOHO

The ROI team uses the Zoho Customer Relationship Management (CRM) system to (a) extract participant data from a central location, (b) build detailed surveys and evaluation instruments, (c) automate workflow (e.g., course and scholarship applications), (d) create dashboards for data visualizations, and (e) produce seamless communication with clientele via integrations with Zoho Campaigns (an email marketing platform). One major benefit of Zoho CRM is the presentation and storage of data in one place. Using Zoho Analytics, the system can retrieve information from multiple sources and use it to create various dashboards highlighting important data. These dashboards provide the team with critical metrics on program outcomes (Ali et al., 2021). The team also integrated the learning management platform (Canvas) with Zoho CRM. The purpose of this integration was to quickly determine course completion rates, demographics, and impact data. Data collected from surveys within Zoho are easily downloaded directly to Microsoft Excel or SPSS (the statistical software used for data analysis). The direct SPSS transfer function significantly reduces the workload associated with data cleaning and management.

Since cohort sizes for the CRWP course can average between 30 to 85 participants per month, the registration process can become tedious. With Zoho CRM, the team automates this process to provide participants with a user-friendly application and payment experience. The automation feature can filter through a list of names to supply a list of appropriate participants who met certain course prerequisites. The team also utilized Zoho Campaigns to provide participants with up-to-date job opportunities, remote work resources, and past participants’ success stories. The program coordinators can schedule and send weekly email campaigns to over 3,000 past and present participants whose subscriptions are managed through this integration.

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SOCIAL MEDIA: ZOHU SOCIAL

In addition to Slack, Zoom, and Zoho CRM, social media platforms such as Facebook, Instagram, Twitter, and LinkedIn can be managed through Zoho Social for casual engagement with program participants and the public. Weekly posts about virtual outreach meetings, trainings, job opportunities, and virtual meetups with program coordinators encourage participants to interact with each other outside of the “classroom.” The integration with social media presents various platforms for participants and non-participants to share their experiences with remote work, their successes and challenges, and future job opportunities. The team is currently exploring other strategies for social media engagement as well.

CONCLUSION AND RECOMMENDATIONS

Overall, the systems described above are well-suited for the CRWP course and work well for distance education and remote learning. The tools described in this article have facilitated successful participant engagement in virtual forums and streamlined the process of reporting outcomes and impacts from online courses.

The effective use of technology enhances Extension professionals’ ability to successfully plan and run their programs. Selecting appropriate technology requires Extension professionals to understand the learning preferences of their target audience—as well as what tools they are already comfortable using—before incrementally introducing new technology. A CRM can be useful to any Extension program seeking to improve the efficiency of record keeping, program reporting, data management, and communication. Training is often necessary to properly navigate and set up a CRM system for managing program data. We recommend that Extension professionals explore various free trials of CRM platforms and seek training before final selection and implementation. In addition, free trial versions of messaging and interactive video conferencing software are available, and program coordinators should explore and assess these options with their target audiences before investing in a paid software service.

REFERENCES

- Ali, A. D., Hill, P. A., Bria, D. C. (2021). Communicating program outcomes and impact using data visualization dashboards. *Outcomes & Impacts Quarterly*, 1(4). <https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1015&context=oiq>
- Arnold, M. E. (2018). From context to outcomes: A thriving model for 4-H youth development programs. *Journal of Human Sciences and Extension*, 6(1). <https://www.jhseonline.com/article/view/653>
- Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. Pearson FT Press.
- Pratiwi, H. I., Tho, C., Suparta, W., Tristeyarso, A., & Abdurachman, E. (2020, November). *An outlook of rarely used feature functions on Zoom video conference technology in higher educations*. In *2020 International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS)* (pp. 269–271). IEEE. <https://www.doi.org/10.1109/ICIMCIS51567.2020.9354303>
- Ronkowitz, K. & Ronkowitz, L. C. (2021). Choosing transformation over tradition: The changing perception of online education. *American Journal of Economics and Sociology*, 80(1), 205–229. <https://doi.org/10.1111/ajes.12378>
- Sabin, J. & Olive, A. (2018). Slack: Adopting social-networking platforms for active learning. *PS: Political Science & Politics*, 51(1), 183–189. <https://doi.org/10.1017/S1049096517001913>
- Sobrero, P. M. (2008). Essential components for successful virtual learning communities. *Journal of Extension*, 46(4). <https://archives.joe.org/joe/2008august/a1.php>
- Vergot, P., III, Zazueta, F. S., & Beck, H. (2004). Use of personal digital assistants for Extension program record keeping. *Journal of Extension*, 42(4). <https://archives.joe.org/joe/2004august/tt6.php>