Tengeru Community Development Journal
ISSN 1821-9853(Print) ISSN 2665-0584(online)
Vol. 10, No.1, 2023

Online Webinars and Digital Competency Development at Monduli TICD Campus, Arusha: Reported Benefits, Challenges and Support Priorities

Mariah Lashau[1] and Mariam Juma[1]

Community Development Training Institut - Monduli, Arusha

Corresponding Author: nyamairajuma@gmail.com

Article History
Received: 2022-July-15
Revised: 2023-February-01
Accepted: 2023-April-15
Published: 2023-June-15

Keywords
Webinars, digital competence, perceived benefits, online learning, community development training, Tanzania

How to cite:
Lashau, M. & Juma, M. (2023). Online Webinars and Digital Competency Development at Monduli TICD Campus, Arusha: Reported Benefits, Challenges and Support Priorities. *Tengeru Community Development Journal, 10*(1): 30-37.

Copyright © 2023 The Author(s). This article is licensed under the Creative Commons Attribution–ShareAlike 4.0 International Licence (CC BY-SA 4.0).
https://creativecommons.org/licenses/by-sa/4.0/

Abstract

Online webinars can extend access to instruction, but perceived benefits do not necessarily translate into improvements in digital competence or self-employment. This study described recorded competency categories, perceived webinar benefits, participation challenges and suggested support strategies at Monduli Community Development Training Institute, Tanzania. A descriptive study included 120 participants: 100 students at National Technical Award levels 4–6 and 20 tutors. The study used questionnaires and interviews, and summarised results using frequencies and percentages. In the pooled tabulations, basic competency accounted for 75 records (62.5%), intermediate competency for 40 (33.3%) and advanced competency for five (4.2%). Knowledge enhancement was the most frequently recorded benefit (50; 41.7%), followed by skills development (30; 25.0%). Technical issues were the most frequently recorded challenge (45; 37.5%), followed by privacy and security concerns (30; 25.0%) and time-zone differences (25; 20.8%). Technical infrastructure improvement was the most frequently recorded support priority (45; 37.5%). The findings identify areas for institutional planning but do not demonstrate causal learning gains, objectively assessed proficiency or self-employment outcomes. The study does not separate student and tutor responses, limiting conclusions about youth learners. Practical recommendations include dependable connectivity, preparation and reminders, interactive learning activities and technical assistance. Before making stronger claims about effectiveness, researchers must verify response formats, participant-group tabulations, and competency definitions.

1.0 Introduction

1.1 Webinars, digital competence and employment preparation

Digital competencies can support the use of online information, communication tools and services relevant to work and enterprise. However, attending an online session, reporting a benefit and demonstrating proficiency are distinct outcomes. DigComp 2.2 describes digital competence through knowledge, skills and attitudes, providing a reference for making competence expectations explicit (Vuorikari et al., 2022). The International Labour Organization's core-skills framework also situates digital skills within a broader approach to personal and professional development through lifelong learning (ILO, 2021b). These perspectives support attention to work-related learning without assuming that training participation produces employment.

Webinars are synchronous online seminars that permit geographically separated participants to receive instruction and interact. Recorded sessions can supplement this format, but watching a recording differs from participating in a live webinar. Ebner and Gegenfurtner (2019) compared webinar, asynchronous online and face-to-face instruction in a meta-analysis of randomized studies. Their findings indicated broadly comparable learning outcomes, with small differences across formats. This evidence supports examining webinars as an instructional option; it does not imply that every programme improves competence or that perceived satisfaction equals measured learning.

Readiness also matters. Ngampornchai and Adams (2016) found that familiarity with mobile and social technologies did not necessarily translate into familiarity with collaborative e-learning tools in their study of students in Thailand. While that setting differs from Tanzania, the distinction cautions against treating device access as evidence of readiness for instructional participation. UNESCO's Global Education Monitoring Report similarly examines the conditions under which education technology can serve learners, including access, governance and teacher preparation (UNESCO, 2023).

1.2 African and Tanzanian context

The ILO's synthesis of digitalization in education across Ethiopia, Kenya, Malawi, Rwanda and Tanzania considers changes in teaching and the challenges of using technology in education (ILO, 2021a). Manyengo (2021) provides a Tanzania-specific account of governance, opportunities and challenges. These sources establish the relevance of examining institutional conditions, rather than assuming that the presence of digital tools assures meaningful participation or effective instruction.

At Monduli Community Development Training Institute in Arusha Region, this study examines recorded perceptions of webinars and digital competency development. The practical question is which benefits and obstacles participants report, and which forms of support they prioritise. Such evidence may support institutional planning, but student experiences and tutor perspectives differ analytically. A pooled distribution provides an institutional snapshot and cannot be read as the proficiency distribution or learning gains of youth students alone.

1.3 Study purpose and contribution

The study aimed to describe webinar-related competency categories, perceived benefits, participation challenges and suggested support strategies at Monduli Community Development Training Institute. The four specific objectives were to describe the recorded digital competency categories; examine reported webinar benefits; identify reported participation challenges; and describe suggested strategies for improving delivery. This study treats self-employment as a potential application of digital skills, not an outcome it measures.

The contribution is a descriptive institutional account that distinguishes participants' reported benefits from evidence of learning or employment effects. It connects the recorded categories to questions of instructional support and digital readiness. The local focus can inform programme development, while claims of wider novelty remain bounded by the measurement and sampling documentation. The study does not test whether webinars are superior to other instruction, or whether they produce new enterprises, income growth or job creation.

1.4 Analytical perspective

The Community of Inquiry framework distinguishes teaching, social and cognitive presence in online educational experiences (Garrison et al., 2000). It provides a useful interpretive perspective: preparation and facilitation concern teaching support; networking and interaction concern social participation; and knowledge or skills reports concern perceived learning. The framework was developed for computer-mediated educational communication and is applied here cautiously to webinar delivery. This study did not independently measure or statistically test its constructs.

DigComp 2.2 provides a complementary measurement reference for future assessment of digital competence (Vuorikari et al., 2022). The source categories "basic," "intermediate" and "advanced" are retained as recorded labels, but they are not assumed to be validated DigComp classifications. Establishing proficiency would require practical tasks, scoring rules, and defined thresholds. The analysis therefore separates participation conditions, perceived benefits and demonstrated competence.

2.0 Methodology

2.1 Setting and study design

The study was conducted at Monduli Community Development Training Institute in Monduli District, Arusha Region, Tanzania. The institution was purposively selected because students and tutors used webinars and digital tools. A descriptive design was used to document the recorded competency categories and perceptions of benefits, challenges and support strategies. Individual respondents were the units from which responses were collected; the institution was the study setting.

2.2 Participants and sampling

The study included 120 participants: 100 students at National Technical Award levels 4, 5 and 6, and 20 tutors described as key informants. The reported population was 1,200, and the sampling

account states that respondents were randomly selected from a sampling frame. The sample was 10% of the reported population; this fraction does not itself establish statistical precision or representativeness. Specify the student and tutor selection procedures separately because their roles and sources of knowledge differ.

2.3 Data collection and measurement

Primary data were collected using questionnaires and interviews. The source account describes written questionnaires for respondents willing and able to respond in writing, and face-to-face interviews for respondents preferring oral communication. The results are organised into competency categories, reported benefits, challenges and suggested support strategies. They do not include a competency test, baseline assessment, comparison group or follow-up employment measure.

2.4 Data analysis

The source account states that data were checked, coded and analysed using SPSS and Microsoft Excel. This article reports frequencies and percentages because no means, dispersion measures or inferential outputs are provided. We recalculated percentages as the category frequency divided by 120, multiplied by 100, and rounded to one decimal place. Each supplied table sums to 120 category records, but it does not separate student and tutor components. The distributions are therefore presented as pooled records rather than student-specific estimates.

The tabulated category labels are retained where the prose and table differ. This preserves the available numerical record without assuming that conflicting descriptions represent equivalent items. The response format is not sufficiently documented to establish that each participant selected exactly one category or that barriers were mutually exclusive. No group comparisons, causal effects or employment outcomes are inferred. No qualitative themes or quotations are added because coded interview outputs were not provided.

3.0 Results and Discussion

3.1 Recorded competency categories

The basic category accounted for 75 records (62.5%), the intermediate category for 40 (33.3%) and the advanced category for five (4.2%) (Table 1). These values describe the supplied pooled distribution. Without separate student and tutor tabulations and defined assessment criteria, they cannot establish the proportion of youth students with each proficiency level or the competencies acquired through webinars.

Table 1: Recorded digital competency categories

Recorded category	Frequency	Percentage
Basic	75	62.5
Intermediate	40	33.3
Advanced	5	4.2
Total	120	100.0

3.2 Reported benefits

Knowledge enhancement was the most frequently recorded benefit (50; 41.7%), followed by skills development (30; 25.0%). Personal growth and networking opportunities each accounted for 20 responses (16.7%) (Table 2). These are perceived or reported benefits. They do not demonstrate increased knowledge scores, practical task performance or self-employment outcomes.

Table 2: Reported webinar benefits

Reported benefit	Frequency	Percentage
Knowledge enhancement	50	41.7
Skills development	30	25.0
Personal growth	20	16.7
Networking opportunities	20	16.7
Total	120	100.0

3.3 Reported challenges

Technical issues accounted for 45 responses (37.5%), privacy and security for 30 (25.0%), and time-zone differences for 25 (20.8%). Limited networking opportunities and content delivery each accounted for 10 responses (8.3%) (Table 3). The networking label follows the original table. The original narrative described remoteness and lack of internet under the same count, so its substantive meaning requires verification. Time-zone differences are retained as recorded and are not reinterpreted as general scheduling difficulties without supporting evidence.

Table 3: Reported webinar challenges

Reported challenge	**Frequency**	**Percentage**
Technical issues	45	37.5
Time-zone differences	25	20.8
Privacy and security	30	25.0
Limited networking opportunities	10	8.3
Content delivery	10	8.3
Total	120	100.0

3.4 Suggested support strategies

Improving technical infrastructure accounted for 45 responses (37.5%), promotion and reminders for 30 (25.0%), and comprehensive preparation for 25 (20.8%). Active participant engagement and technical support each accounted for 10 responses (8.3%) (Table 4). These are reported suggestions, not evaluated interventions. The original table is retained because the narrative assigned different labels to some counts and included background-noise mitigation without a corresponding table category.

Table 4: Suggested webinar support strategies

Suggested strategy	Frequency	Percentage
Improve technical infrastructure	45	37.5
Comprehensive preparation	25	20.8
Effective promotion and reminders	30	25.0
Active participant engagement	10	8.3
Provide technical support	10	8.3
Total	120	100.0

Note. Percentages use 120 pooled participants. These frequencies describe suggestions and do not establish intervention effectiveness. Labels follow the supplied table and should be confirmed against the instrument and dataset.

3.5 Discussion

3.5.1 Reported learning benefits and competency assessment

Knowledge enhancement and skills development were prominent in the recorded benefit categories. They provide reasons to investigate how webinar instruction might support learning, but the available evidence does not determine the size of a gain or attribute it to webinars. Ebner and Gegenfurtner (2019) distinguish objective learning measures from participant reactions in their analysis of instructional formats. That distinction is central here: an institutional perception survey and a comparative evaluation answer different questions.

The predominance of the basic competency label may indicate a need to assess foundational skills before introducing more demanding tasks. This is a planning hypothesis rather than a validated diagnosis because the categories lack documented assessment thresholds and may combine student and tutor responses. DigComp 2.2 can help define future learning objectives and performance criteria, but the institute's programmes need locally appropriate examples (Vuorikari et al., 2022). Familiarity with smartphones or webinar attendance should not substitute for demonstrated competence.

3.5.2 Participation conditions and instructional support

Technical issues and privacy concerns were the two most frequently recorded challenge categories. Dependable access matters for participation, but technical readiness alone cannot ensure learning. Manyengo (2021) situates digitalization within wider Tanzanian educational opportunities and challenges, while UNESCO (2023) stresses the importance of the conditions under which technology is introduced. These sources support an institutional assessment of delivery conditions rather than an assumption that online provision is inherently accessible or effective.

The reported support priorities concern both infrastructure and session organisation. Preparation, promotion and reminders may help participants enter sessions ready to engage; interactive tasks and assistance may support participation during delivery. The Community of Inquiry perspective highlights teaching and social presence as part of the educational experience (Garrison et al., 2000). Here, that perspective explains the need to investigate, not prove, that the three presences

were achieved or caused learning. A recording or presentation should not be treated as a substitute for all interaction and feedback.

Time-zone differences require contextual interpretation because the study was conducted at a single Tanzanian institution. They might relate to externally hosted sessions, but the available account does not identify hosts or session locations. Similarly, the networking category cannot support a conclusion about geographic connectivity until its wording is reconciled. Programme decisions should be based on the verified concern: scheduling, peer interaction and internet coverage would require different responses.

3.5.3 Relevance to youth self-employment

Digital skills can support communication, information management, and enterprise activities, but this study did not measure business creation, earnings, sales, customer numbers, or sustained employment. The ILO (2021b) places digital competence within broader capabilities for life and work; it does not establish that webinars alone produce self-employment. The appropriate implication is to design practice activities and later evaluate their use in real tasks. Claims that participants acquired proficiency in digital marketing, e-commerce, or content creation should be made only if those skills were assessed.

Learner readiness and institutional support should also be distinguished from entrepreneurial outcomes. Ngampornchai and Adams (2016) show why acceptance of online learning and familiarity with particular tools deserve attention, but their results do not predict outcomes at Monduli. For the present institute, an enterprise-oriented programme would need both defined skill objectives and evidence of transfer. Follow-up assessment would be necessary to establish whether learners apply skills beyond training.

4.0 Conclusion and Recommendations

The recorded distributions indicate that participants associated webinars with knowledge enhancement, skills development, personal growth and networking, while reporting technical, privacy, scheduling and delivery concerns. Infrastructure improvement, reminders and preparation were prominent among the suggested support categories. These findings provide an exploratory basis for institutional planning, subject to verification of respondent-group tabulations and category wording. They do not demonstrate that webinars increased youth competence or generated self-employment.

The institute should assess connectivity and equipment reliability, provide platform orientation and technical assistance, and use clear session schedules and reminders. Tutors should incorporate practical tasks, questions and feedback aligned with explicit learning objectives. Privacy safeguards and instructions for safe participation should accompany platform use. These measures should be piloted and assessed rather than presented as interventions already proven by this study.

Evaluation should separate student experience from tutor perspectives and assess practical competence using documented tasks and criteria. Future research on webinar effectiveness could include pre- and post-assessments and, where feasible, an appropriate comparison. Follow-up

evidence would be needed for claims about application in self-employment. Programme monitoring should distinguish attendance, perceived usefulness, demonstrated learning and employment-related outcomes.

References

Ebner, C., & Gegenfurtner, A. (2019). Learning and satisfaction in webinar, online, and face-to-face instruction: A meta-analysis. *Frontiers in Education, 4*, Article 92. https://doi.org/10.3389/feduc.2019.00092

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2–3), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

International Labour Organization. (2021a). *Digitalization in teaching and education in Ethiopia, Kenya, Malawi, Rwanda and the United Republic of Tanzania: Synthesis report.* https://www.ilo.org/publications/digitalization-teaching-and-education-ethiopia-kenya-malawi-rwanda-and

International Labour Organization. (2021b). *Global framework on core skills for life and work in the 21st century.* https://www.ilo.org/publications/global-framework-core-skills-life-and-work-21st-century

Manyengo, P. R. (2021). *Digitalization in teaching and education in the United Republic of Tanzania.* International Labour Organization. https://www.ilo.org/publications/digitalization-teaching-and-education-united-republic-tanzania

Ngampornchai, A., & Adams, J. (2016). Students' acceptance and readiness for E-learning in Northeastern Thailand. *International Journal of Educational Technology in Higher Education, 13*, Article 34. https://doi.org/10.1186/s41239-016-0034-x

UNESCO. (2023). *Global education monitoring report 2023: Technology in education—A tool on whose terms?* https://www.unesco.org/gem-report/en/publication/technology

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The digital competence framework for citizens—with new examples of knowledge, skills and attitudes.* Publications Office of the European Union. https://doi.org/10.2760/115376.