



Community Digital Story Project: George Community Needs

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Authors' contributions

This work was carried out in collaboration between all authors. Author JS designed the study. Authors AS, CK and NB wrote the first draft, and author AS managed the literature review. Authors JS and AS reviewed and edited the draft, and produced the second draft. All authors read and approved the final manuscript.

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ABSTRACT

This study details a Digital Story Community Project undertaken by the Centre for Innovative Education and Communication Technologies of the University of the Western Cape, which took place in George (South Africa) in November 2014. The aim was to explore, via digital stories, the authentic needs of vulnerable community sectors by engaging with representatives, leaders and activists from those sectors, while equipping them in turn with transferable skills in the production of digital stories. Digital stories proved to be an excellent tool for community need identification, while simultaneously building digital skills among community members in a range of areas such as storyboarding, script writing, image preparation, and voice recording. A Sociocultural Constructionist and Asset-Based Community Development theoretical approach underpinned this research and proved an excellent fit for the creation of community narratives. A mixed methodology was adopted in this empirical study, relying primarily on qualitative data with quantitative support. Qualitative measures include pre- and post-survey questionnaires, facilitators' observations during the

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workshop, participant feedback within an online discussion forum, as well as the perceived impact and application of digital stories. The skills attained, community needs and solutions produced, and the potential contribution of ICTs in these are also discussed. Supporting quantitative measures are drawn from an analysis of responses to the pre-and post-survey questionnaires and attendance numbers during the workshop. Identified needs clustered around four interrelated themes: youth, economic challenges, substance abuse, and healthcare. The use of digital stories in identifying community needs, in a theoretically sound manner, is recommended in future research focusing on community development. It is no longer possible or desirable to speak on behalf of communities in relation to their development needs, and the digital story eTool is appropriate for obtaining authentic community data, while building skills.

Keywords: Digital story; digital inclusion; community needs; development; training intervention.

ABBREVIATIONS

ABCD: Asset-Based Community Development; **CIECT:** Centre for Innovative Education and Communication Technologies; **eCentre:** a public place where people can access computers, the Internet, and other digital technologies that enable them to gather information, create, learn, and communicate with others while they develop essential digital skills (Wikipedia); **eLearning environment:** An online environment within the institutional learning management system (Sakai/iKamva platform), and other Personal Learning Environments (PLE's) within Google Applications; **eSkills:** refers to the ability to develop and use ICT to adequately participate in an environment increasingly dominated by access to electronically-enabled information, and a well-developed ability to synthesise this information into effective and relevant knowledge [27]; **eTools:** communication, content creation and assessment tools used within eLearning environments; **HNU:** Hochschule Neu-Ulm; **ICT:** Information and Communications Technology; **iNeSI:** iKamva National eSkills Institute; **IS:** Information Systems; **NDP:** National Development Plan; **NMMU:** Nelson Mandela Metropolitan University; **NQF:** National Qualifications Framework (of South Africa); **SAPS:** South African Police Service; **UWC:** University of the Western Cape; **VULNERABLE COMMUNITY:** "Groups that experience a higher risk of poverty and social exclusion than the general population. Ethnic minorities, migrants, disabled people, the homeless, those struggling with substance abuse, isolated elderly people and children all often face difficulties that can lead to further social exclusion, such as low levels of education and unemployment or underemployment" [28].

1. INTRODUCTION

This paper reflects on a recent Digital Story Community Project undertaken in George, South Africa, by the Centre for Innovative Education and Communication Technologies (CIECT) of the University of the Western Cape (UWC). This Project was the result of a joint collaboration between multiple partners and stakeholders, including 16 community members who constituted the primary stakeholders, four eCentre Managers from the George region, and the Western Cape CoLab, which is part of the iKamva National eSkills Institute (iNeSI). CIECT also works closely with the Cape Access Management team of the Western Cape Provincial Government, to select specific eCentres and Managers to participate in skills training interventions. For this Project, CIECT also partnered with the Department of Information Systems (IS) at the University of the Western Cape (UWC), and the Hochschule Neu-

Ulm (HNU) University of Applied Sciences in Germany, particularly during the conceptualisation phase. The CIECT team then proceeded to design, develop and deliver the three-day face-to-face training workshop, which was hosted at the Nelson Mandela Metropolitan University (NMMU), Saasveld Campus, in George.

The Project involved 16 participants from the Waboomskraal, Thembaletu, Conville and George Thusong communities. The goal of the Project was twofold, namely to identify and explore authentic community needs, and to build on the skills of the participants. These participants were selected specifically due to their roles as leaders and activists among vulnerable community sectors, whose needs are often most pressing yet most marginalised. Participant selection was done by eCentre Managers in the George area, who had previously taken part in CIECT's Digital Inclusion

eCentre Manager Training Programme, and who engage on a daily basis with community members with whom they have a close relationship. Indeed, this established relationship between CIECT and the four eCentre managers constituted the first prerequisite for the selection of the George area for this Project. The second prerequisite was that some implementation of previous eCentre Manager training interventions needed to be present, which was the case. Finally, a mix of rural and urban areas was required within a relatively small (and accessible) geographic area, as is the case within the George Municipal district.

The Waboomskraal, Thembaletu, Conville and George Thusong communities all constitute vulnerable areas with numerous community needs, including a strong need for skill development. The Project aimed to contribute both to community building and to skills development by having the participants identify the needs of their specific community sectors in their own voices in a digital story format, and then passing these on to community leaders and local Government Councillors, while at the same time building on the skills of the participants. A Sociocultural Constructionist and Asset-Based Community Development (ABCD) theoretical approach supports such a community initiative well, and will be used in this paper to illustrate the value of digital stories to skills development in this context.

The urgency of both community and skill building in George is emphasized by information from the South African national census of 2011. Of a total population of 193,672 in the George municipality, 102,090 (52.71%) are 29 years of age or younger [1]. Of the population above the age of 20 (121,730), only 49,811 (40.9%) had finished high school or a higher education qualification [1]. Moreover, the census recorded an unemployment rate of 20.7% in 2011, down from 27.8% in 2001, but up from 17.9% in 1996 [1]. The unemployment rate has thus fluctuated quite dramatically in the recent past, no doubt further contributing to job insecurity. According to additional figures from 2011, the youth unemployment rate stood at 27.6%, thus reinforcing the severity of the problem [2]. Out of a total of 53,551 households, 8,060 (15%) were classified as living in informal or traditional dwellings, 16,200 had a computer (30.25%) and 19,760 had internet access (36.9%), with the majority having access at home (14.4% of total population) and via their cell phones (14.2% of

total) [1,2]. In terms of sanitation, 5,546 households (10.36%) either had access only to a pit latrine, a bucket latrine, or none [1].

The participants of the George Community Digital Story workshop were not only the representatives of vulnerable sectors within the community, but like their fellow community members they face very challenging, harsh living conditions on a daily basis as these statistics indicate, including high levels of poverty and unemployment, widespread substance abuse, and lack of adequate sanitation and health care. Unfortunately, in the South African context, this experience is shared by many communities, especially rural ones across the country. Some of the challenges include: "illiteracy, cultural barriers, lack of computer skills and technological know-how, lack of access to computers and computers networks...no Internet access, lack of significant usage opportunities" [3]. These are significant impediments to community development, as "information and communication activities are a fundamental element of any rural development activity" [3].

The workshop participants, understanding the needs of the vulnerable sectors of these communities, were expected to identify these by making use of digital stories, thereby acquiring skills during the design, development and presentation processes. Thus, at the end of the interactive hands-on workshop they presented these needs, their proposed solutions to these needs, as well as their thoughts on how Information and Communications Technologies (ICTs) could contribute to the solutions. These final presentations embodied the desire to expose the participants to a range of skills including script writing, storyboarding, image preparation, scene visualization and planning, voice recording and presentation. Due to their roles as leaders and activists in their community sectors, the participants are well positioned for transferring these skills in turn to the wider community, while building on their own confidence levels in presenting the community's most pressing needs to a wider audience through a variety of media.

The digital story format was selected for this Project as it is well suited to express needs and possible solutions, as well as to stimulate debate. According to [4], digital stories constitute the "art and craft of exploring different media and software applications to communicate stories in new and powerful ways using digital media", with

its main focus on the “creation of personal narratives rather than interactive stories or games.” The same author [4] also provides a useful identification of the applications of digital storytelling, namely “movies featuring images, video clips, soundtrack, and narration; storytelling performances and talks supported by media slideshows or interactive presentations; and Web-based applications, including streaming media, podcasts, and blogs. Other applications include hypertextual narratives and interactive games.”

As [5] notes, the process involved in the production of digital stories is at least as important as the final product, since it promotes not only the development of skills, but also reflection, or as [6] call it, “reflection-in-practice”. Accordingly, digital stories allow individuals to reflect upon the manner in which their lives are jointly shaped by “material circumstances (structures) and interior processes and motivations (agency)” [5]. In community development contexts, digital stories can be a powerful transformative tool, since the sense of community is strengthened by the act of sharing stories because, as [6] note, “the producers of shared stories are also the consumers”. This act of sharing stories can feed the discussion regarding the “salient narratives” within these communities [6]. Ultimately, this Project sought not only to build on community members’ skills, but more broadly fostered what [5] calls a “close examination of one’s own experience and its location within an unjust social and political context”. Such an examination is a precursor to the development of critical consciousness, and ultimately social change.

The choice of using digital stories in this Project was supported by its nature as a multimedia approach that enables the weaving of images, music, narrative and voice together giving a deeper, authentic dimension to a story, with which the audience can readily connect. Therefore, while a clear picture exists of the challenges present in the broader George region from census and other statistics, the opportunity for individual voices to be heard, particularly from the most vulnerable sectors, breathes life into the statistics, and reinforces the urgency of those challenges. Moreover, the impressions formed from the digital story metastory, described by [6] as “a story of the collected stories, of the group – out of many, one” enriches the existing statistical data.

The value of a multimedia approach is noted by [7], who point out that it can enhance learning by expanding beyond traditional “verbal forms of presentation”, particularly with the addition of visual and audio elements. From the facilitators’ observations during the workshop, discussed later in this paper, it can be seen that the confidence of participants in the attainment and use of new skills grew day by day, culminating in their presentation of completed digital stories. However, this is only visible from the ground level, emphasising the importance of engaging in hands-on face-to-face learning, in combination with online elements (i.e. blended learning). This is also important in the building of trust and relationships between the facilitators and participants, and between the participants themselves.

An additional advantage of using digital stories in relation to community needs is identified by [5], who emphasises that the weaving together of a metastory from individual stories is of special relevance in Southern Africa, “where historic legacies of media exploitation and questions about visual and narrative representation continue to reverberate”. With the successful production of their digital stories, participants were not only able to voice their own community sector’s needs, but these stories became the final expression of their growing confidence levels with the tool.

This paper aims to contribute to the understanding of the importance and value of digital stories by demonstrating its ability to a combine community building and skills building initiatives, particularly among communities lacking high levels of computer literacy. The authors also hope to illustrate the importance of relationship building in community projects, and that the success of such projects depends most of all on constructive and trustworthy partnerships.

2. BACKGROUND TO COMMUNITY DIGITAL STORY PROJECT

This blended learning digital story course was a follow-up of CIECT’s ongoing Digital Inclusion eCentre Manager Training Programme (2011-2014), which focuses on expanding the skills of eCentre Managers in deep-rural, rural, urban and peri-urban regions within the Western and Northern Cape provinces. This digital inclusion Programme enabled the eCentre Managers to effectively make use of various electronic tools

for instructional and marketing purposes, and to transfer their skills to the broader community.

From the outset, the conceptualisation of the Digital Story Community Project centered on a mutually beneficial relationship, whereby CIECT enhanced the skillsets of the community members (participants) through the creation of digital stories, while the participants in turn presented authentic needs via this medium. These community digital stories were further segmented into themes, and summarised, by UWC and the HNU German postgraduate students for analysis and presentation via their own digital stories, which constituted an assessment task. The students could thus also gain skills and could use the evidence effectively for their post-graduate research projects. Furthermore, additional research topics will be provided to Masters students in future.

Ultimately, the lessons learnt from this Community Project can (i) strengthen engagement and partnerships; (ii) lead to roll-out of the project to other communities; (iii) contribute to iNeSI's broader initiative regarding digital inclusion and social innovation; and (iv) expand the awareness regarding the effective use of ICTs for community development.

The researchers also present a framework, highlighting that such an intervention is not merely about training and support, and cannot be undertaken in an ad hoc manner. Rather, the framework represents CIECT's contribution within the broader Ecosystem¹, situated in a dynamic, complex environment, focusing on the infusion of emerging technologies for community development. Hence this paper will highlight, in a non-linear manner, the interrelated areas of: Training and Support, Research, Community Engagement and Collaboration. This framework is aligned to national policies, such as the National Development Plan (NDP) of South Africa, which emphasises the importance of fostering "a post-school system that provides quality-learning opportunities to young people, adults who want to change careers or upgrade skills, people who have left school before completing their secondary education and unemployed people who wish to start a career.

¹ *Ecosystem, in this context, is defined as: "An ICT ecosystem encompasses the policies, strategies, processes, information, technologies, applications and stakeholders that together make up a technology environment for a country, government or an enterprise" (Open ePolicy Group, 2005, quoted in [9]).*

Post-school institutions should provide programmes and services that meet the range of needs" [8].

The framework is presented in Fig. 1, and also highlights, under Training and Support, the stages of the intervention: equipping community members with eSkills; the Application of these in relation to the digital story production; the Collation of the individual community digital stories into what [6] call a metastory, and ultimately the Relationships established and strengthened among community members.

Given that the George Community Project is a follow-up of CIECT's Digital Inclusion eCentre Manager Programme, it is useful to place it within this broader context. At UWC, the CIECT support structure caters for the training, development and support of ICT applications, not only for academics, but also for non-academics and students of all faculties. These training and support activities are grounded in established research and theory, particularly regarding learning processes within an online environment. For any learning to take place within an online or electronic context, the critical steps of access and motivation, and online socialisation must be addressed before any information exchange can take place [10]. Accordingly, all of CIECT's training and support activities, both within UWC and outside, are geared towards creating a learning environment that is as encouraging and welcoming as possible, as well as connections between this learning environment and the socio-cultural context of the learner. Such an instructional strategy is premised on a scaffolding approach, which caters to the learner's zone of proximal development, understood as the gap between existing knowledge and the potential knowledge and development that can occur with sufficient educational support [11]. This approach also contends that cognitive growth and learning result from social interaction, which is an important factor in understanding the design and delivery of the George Community Digital Story Project.

The Western Cape CoLab (formerly known as the Western Cape Knowledge Production and Coordination Hub), in which CIECT is a stakeholder, is situated at UWC. The CoLab itself is one of five provincial eSkills Knowledge Production and Coordination CoLabs situated across South Africa, and falls under the auspices of the iKamva National eSkills Institute [12]. iNeSI was set up by the South African

Government, Department of Communications (now referred to as the Department of Telecommunications and Postal Services), to “reduce the lack of e-skills in the country and the impact this has on equitable prosperity and global competitiveness” [13]. The Cape Access management team is situated in the Western Cape Provincial Government, and manages eCentres within various communities in urban and rural areas, including George. These eCentres are expected to deliver ICT services to the less privileged communities with limited ICT access [14]. At these eCentres, community members are able to make use of various services, including free printing, training, and accessing computers for personal, work and study purposes.

In collaboration with these partners, CIECT has successfully designed, developed and delivered a Digital Inclusion blended eSkills Programme (which includes face-to-face and online teaching-and-learning interventions). Since 2011, this registered programme (National Qualifications Framework of South Africa, NQF Level 6) has been rolled out to 44 eCentres.

This eCentre Manager Training Programme focuses on enhancing the skills of eCentre managers in urban and rural regions to effectively make use of a variety of eTools to market their specific services, and to transfer the attained eSkills within train-the-trainer Programmes [15,16]. The importance of such a training programme cannot be understated in the South African context. [17] note that in response to the dire need for ICT access in disadvantaged communities, particularly in rural areas, the Government selected a centre approach during the mid-1990s. Such an approach consists of the establishment of Multi-Purpose Community Centres, Telecentres or ICT centres (called eCentres in this paper) that can address the telecommunications and general information needs in communities [17].

The centre approach was optimistically seen as “the solution to the ever-widening digital divide”, that in turn could contribute to the development of those disadvantaged communities that need it the most [17]. However, [17] note with concern that the centres established by the Government faced an array of problems from their inception that turned some into “struggling, ill-managed communications shops where hardly any information is currently being disseminated”, due to challenges surrounding poor infrastructure and

maintenance, and a lack of effective management. While more than a decade has passed since these comments were made, the need for effective and knowledgeable management remains, and in this context, the Digital Inclusion training programme plays an important role in the broader creation of “an e-literate (online) public able to take advantage of these technological advances and drive demand for services” [8].

Apart from strengthening the skills of the eCentre managers, a core component of the training programme is to enable the participants to engage in train-the-trainer ICT interventions within their individual communities, as well to support their general transference of skills to their communities. However, to effectively engage in these, the participants had to align and apply the implementation and transferal of skills to the specific needs of their communities. eCentre managers were moreover expected to collaborate with CIECT regarding further training courses, such as the current George blended community digital storytelling Project, which aimed precisely at highlighting these community needs in a manner that not merely obtains information from community members, but that equips them with transferable skills in return.

3. LITERATURE REVIEW: TRAINING INTERVENTION ALIGNED TO LEARNING THEORIES

The training course delivered to community members in George is rooted in [18]’s theory of sociocultural constructionism, as well as asset-based community development (ABCD). The theory of sociocultural constructionism focuses on development initiatives in communities that have been traditionally “underserved by technology”, and starts by recognising community members as more than passive recipients or consumers of information and ICT content, but as active producers [19,18].

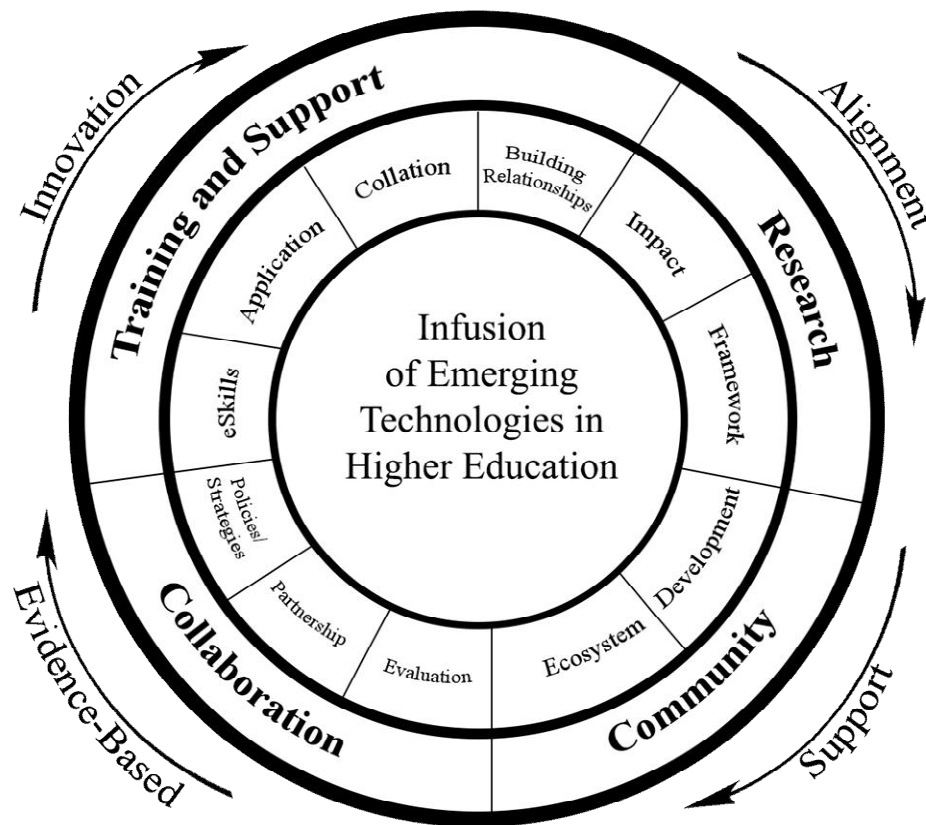
The sociocultural constructionism theory consists of three core components, drawn together from three other theories. Firstly, it incorporates from Constructionism the idea that individuals learn best through participation in “socially and culturally organized practices”, and that this learning is most effective when there is active participation in the design of learning activities (which is certainly the case with digital story production) [19]. Secondly, from Social Constructionism, it incorporates the concept that

individuals grow and develop better through constructive activities that take place in social settings with others. Lastly, it takes from Cultural Constructionism the idea that people learn best when they create cultural constructs that encapsulate their cultural identity and that have a shared meaning within their broader culture [19]. Such a cultural construction can be any item that expresses the individual learner's cultural identity and facilitates their engagement with new information (such as a digital story).

Combining these then, [19] arrives at the theory of Sociocultural Constructionism. At its core the theory thus contends that "individual and community development are reciprocally enhanced by independent and shared constructive activity that is resonant with both the social environment of a community of learners, as well as the culture of the learners themselves" [18]. Such shared constructive activity is centred on the creation of a "physical, virtual, or cognitive

artefact that is resonant with the social and cultural milieu" [18,19].

Similarly, asset-based community development (ABCD) starts from the assumption that social or economic growth must start from within the community. Initially, community members must be recognised not as passive recipients or "clients" waiting for beneficent outsiders to uplift them, but as active change agents with an indigenous vision for their own communities [18]. Next, the emphasis must be placed not on what may be absent or lacking in a community, but on those assets that exist already, in the form of resources, capacities, or "associational, institutional, and commercial foundations" [18]. To arrive at sound community building practices, these indigenous assets must be coupled with the identification of the community's own needs and interests by its members, and the fostering of fruitful relationships between community members and assets.



Model by Dr. Juliet Stoltenkamp September 2014

Graphic by Faried Ahmed and Faghad Khan

Fig. 1. Infusion of Emerging Technologies: Impact of CIECT's activities in a community context

In this case, digital stories are an example of such a shared constructive activity that contributes to relationship building, and that supports the ABCD approach. In particular, the digital stories built upon the existing relationships present within the community, such as those between the eCentre managers and the community members they selected for participation. Thus, the institutional foundations created by the eCentre network itself formed a crucial asset underpinning the intervention. Other assets included the experiences of the community members themselves, both within their specific sectors and broader community, and the vision they contributed in terms of addressing the needs they identified. Their unique roles and contexts enriched the digital stories, and in turn the digital story medium proved to be valuable in enhancing the visibility of these community assets, and in establishing new relationships between the participants who in many cases identified similar needs.

Digital stories are indeed ideal virtual artefacts on which to base community development interventions, and practical examples of this are evident in the literature. [20] reports on the use of digital stories in English by non-English speakers, and notes that the stories that resulted were “short films of two-three minutes narrated by the participant and illustrated using personal photographs, drawing, animation, film footage and archival museum images”, and importantly, like the digital stories resulting from the George community Project, “Many of the stories are touching ... [and] are a vehicle for highlighting difficult social issues”.

4. STAKEHOLDER MANAGEMENT AND PARTICIPANT SELECTION

Following the initial conceptualisation phase of the Project, which was done by CIECT and the IS Department in collaboration with HNU and the presentation to the other stakeholders, the four eCentre managers from George were invited to UWC to discuss the scope of the project, its requirements and community participant selection. The eCentre managers committed to the Project and agreed to select relevant community members which represented the various vulnerable sectors. Throughout this process, the importance of effective stakeholder management cannot be underemphasised, since relationships with stakeholders “can constitute intangible, socially complex resources” [21]. [21] also emphasise that “Relationships involve

investments by both (or multiple) parties and thereby include a time dimension; reputation is important and fair dealing and moral treatment by both (or multiple) parties enhance the value of relationships”. The logistical arrangements, done by the CIECT office in collaboration with the Nelson Mandela Metropolitan University (NMMU), Saasveld campus, were an expression of building such active relationships. Indeed, the ultimate success of the workshop was based on building relationships with participants (community members), and not solely on the transfer of eSkills.

In terms of participant selection, the eCentre managers were requested to select community members representing a variety of stakeholder groupings within their communities, particularly vulnerable groups, with the dual goal of identifying the needs within these groups, and to transfer the acquired skills and knowledge back to their sectors. The eCentre managers were best placed to conduct the selection process, since they live and work in the communities and engage with community members, including those from vulnerable sectors, on a daily basis. The choice of sectors to be represented was thus left at the discretion of the eCentre managers. The eCentre managers then proceeded, through a difficult process, to select the participants, aiming to find at least 20 community members who would commit to participating in the digital story workshop. Initially, 23 participants were identified by the four eCentre managers, however only 16 attended the three-day workshop. It was required that the selected participants have at least basic ICT skills in order to engage effectively within the workshop.

5. METHODOLOGY

The design and execution of the training course proceeded through five interrelated phases, all centered on the creation of a digital story by the participants, as depicted in Fig. 2. The first of these phases, namely the theoretical basis that supported the initiative, was discussed above and will be returned to in the discussion of the findings. The second consisted of a pre-survey (learner profile) questionnaire, disseminated to the participants identified by the eCentre managers, that assessed the participants’ basic computer literacy skills, and identified their sectors and roles within the community, access to resources, willingness to engage with other participants and prior experience in the creation of digital stories (please refer to the Appendix).

The third was the three-day interactive workshop presented in George, which will be elaborated upon below. The fourth consisted of a post-survey questionnaire that assessed whether the aims of the course had been reached, and what the impact was on the participants (also detailed in the Appendix). The pre- and post-survey questionnaires will be discussed in greater detail in the findings section. Finally, the production of the digital stories, representing the community needs, challenges and solutions, reflected the overall impact of the workshop.

During the first day of training the CIECT facilitators set out to familiarise and socialise the participants with the specific digital story production software, namely Microsoft® Photo Story 3 for Windows. The facilitators shared the functionality and value of the tool and a tell-show-do technique was followed during training. The facilitators also emphasised the importance of the commitment of the participants in sharing their views on their community's needs through their individual focus areas, via the production of the digital story.

This production followed a similar structure to that proposed by [22], albeit with a slightly adapted order. The first step concerned the familiarisation and contextualisation of the participants with digital stories and the online environment they were to navigate, and the discussion of the storyboard, and design and development phases of the production process.

The evaluation criteria for the final product were also clearly set out, since the creation of digital stories always starts with the intention to share the final product with an audience [6]. Therefore, when starting with the production of the digital stories, the accessibility and points of view conveyed must be carefully scrutinised. Accordingly, participants actively discussed the topics relating to the needs identified in their community sectors.

The second day focused on the production of the digital stories, and involved script writing, storyboarding and image preparation, voice recordings to be included in the story, and conversion for online storage. Authentic original photos were taken by participants after the first day of the workshop, and participants were instructed to capture images illustrating the needs present in their communities, and the proposed solutions. The resulting images were valuable precisely because they highlighted problems in the community from the perspectives of the community members themselves – an important facet given the previously mentioned concerns of media exploitation and representation. Participants then proceeded to visualise the story and the sequence of scenes, as well as the interaction of the individual multimedia elements. The writing of the scripts was centered on specific needs and related solutions to assist the participants. These included, for example, what the story's purpose was and what its central point of view would be.

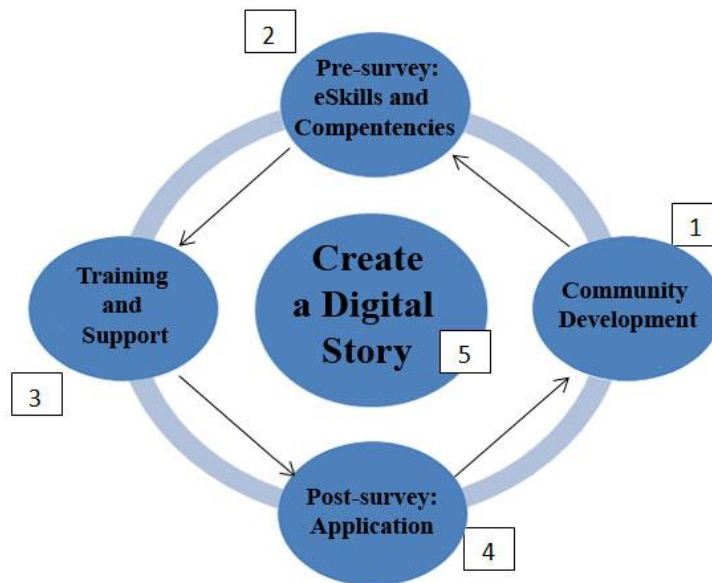


Fig. 2. The blended digital storytelling course for George community members

On the third and final day of the workshop, the peer-review and presentation process took place within a very short time-frame. Participants shared their particular digital stories, and each presentation was video-recorded and will be placed within an online repository. Participants were also able to comment and ask specific questions after each five-minute presentation. Overall feedback was given to participants at the end of the presentation day. Ultimately, as mentioned earlier, the digital story presentations, which were video recorded and uploaded to an online environment (<http://ikamva.uwc.ac.za> – UWC’s Institutional Learning Management System), will be shared with the community leaders and local Government Councillors. Table 1 summarises the production stages of the digital stories across the three-day workshop.

In the next section, the research findings will be discussed and presented according to the main themes. A mixed methods approach will be used, which primarily consists of a qualitative research design, but with some supportive quantitative measures. The qualitative measures include pre- and post-survey questionnaires, facilitators’ observations during the workshop, participant feedback within the online discussion forum detailing their expectations, focus areas, environment, and experiences of facilitation, as well as the perceived impact and application of the eTool. The digital stories presented on the final day of the workshop are analysed, and will assist in determining the impact of the training on participants, the eSkills attained, community needs and solutions produced, and how ICT can contribute to those solutions. Supporting quantitative measures are drawn from an analysis of specific responses to the pre- and post-survey questionnaires and attendance numbers during the workshop. The sources of research data for each phase of the project are outlined in Table 2.

6. RESEARCH FINDINGS

In this section, the researchers firstly identify and describe the primary stakeholders – the participants and the community sectors they represented. This information will be drawn from the pre-survey responses supplied prior to the workshop. Next, the overall observations made by the facilitators will be discussed, to contextualise the learning activities undertaken by the participants, and to provide insight into the motivation and confidence levels of the participants as the workshop progressed. Thirdly,

the experiences of the participants will be analysed in detail, drawn from feedback provided twice on both the first and second days on within an online discussion forum. Fourthly, the community needs identified via the digital stories and online feedback will be investigated, and any commonalities identified, with the aim of providing insight into the living conditions within the communities from which the participants came. Fifthly, the proposed solutions to these needs will be detailed from the final digital stories, highlighting the capacity of the community to produce its own solutions. Finally, the outcomes and skills gained will be discussed, drawn from the course evaluation post-survey.

6.1 The Selected Participants (Community Members)

Prior to the three-day workshop, the 23 community members who were expected to attend were asked to complete a pre-survey learner profile form detailing their names, sectors they represent, roles within the community, their current access to ICT resources, their basic computer literacy skills, prior experience with creating digital stories, and willingness to participate in active group engagement during the workshop.

Fourteen (14) responses were received prior to the workshop and indicated that community members represented a wide range of sectors, including: community activism, community leadership, a rural development project, sports (a football club, school netball, and community rugby development), youth, the South African Police Service (SAPS), the health sector, the unemployed, and business. The roles of the participants within their respective community sectors also differed widely, from advising fellow community members with where to get Government assistance, aiding them in writing letters to Government Departments, chairing a football club, helping children with homework and research, training people in basic computer skills and typing of CVs, recruiting learners for home work clubs, facilitating holiday programmes for school learners, registering people in the Cape Access system, assisting with the raising of eight adopted children, working in a civic movement, volunteering in a local organisation, community development, health sector work, youth leadership and youth sector work, and sports coaching and development.

Table 1. Overview of the three-day workshop

Day 1	Day 2	Day 3
<ul style="list-style-type: none"> ▪ Familiarisation and socialisation with software package ▪ Familiarisation and contextualisation with online environment ▪ Discussion of storyboarding, design and development and evaluation criteria ▪ Requirements for photographs for second day of workshop 	<ul style="list-style-type: none"> ▪ Production of digital stories ▪ Script writing ▪ Storyboarding ▪ Image preparation ▪ Voice recording ▪ Visualisation and scene construction 	<ul style="list-style-type: none"> ▪ Peer-review and presentation ▪ Video recording of individual presentations ▪ Comments and questions ▪ Provision of feedback

Table 2. Overview of methodology

Pre-survey	Facilitators' observations	Online discussion forum	Completed digital stories	Post-survey
14 learner profile responses completed prior to the workshop, detailing: Names Sectors Community roles Current ICT access Basic computer literacy skills Prior digital story creation experience Willingness to actively participate	Observations by facilitators regarding participant engagement and skills development	Participants provided feedback four times – at the start and conclusion of both the first and second days, detailing: Community sector representation, expectations, and aims; Digital story focus areas and needs identified, as well as perceived importance of these; Feedback on planning and storyboarding; Application and contextualisation, overview of digital stories	Analysed for identified needs and solutions, and common themes emerging from these	Completed by participants at conclusion of workshop, detailing: Whether any skills were gained during the workshop; Whether digital stories were considered an appropriate tool for expressing community needs; Whether the workshop enabled the participants to engage with others and whether this can aid community development; Future application of digital stories in community sectors

All respondents except three (3) indicated they had internet access. Ten out of fourteen (71.4%) had access to the internet via their mobile phones, one had access via a computer at home (7.1%), and the remaining three had computers at home but no internet access (21.4%). This reflects the broader experience in sub-Saharan Africa, where the majority of internet access takes place via mobile devices, and mobile data traffic is expected to increase 20-fold by 2019 [23]. In South Africa, there are now more cell phones than people, and the usage patterns underwent a “dramatic shift” so that by 2013 sixteen percent of mobile spending went to data [24]. In terms of the workshop however, the main focus was on understanding the avenues of internet access available to the participants, and the devices they use, so as to gain a clearer picture of the participants themselves.

As for basic computer literacy skills that were relevant to the workshop, all respondents reported being comfortable with copying and pasting between different documents and applications, and all but one indicated they could easily save files and upload attachments. A single respondent replied that they thought they could do it. Only one respondent had previous experience with creating a digital story. However, the facilitators observed that this individual also needed assistance, especially when weaving elements together. Finally, with regards to active group participation, all but one stated that it is interesting to find out about the work and perspectives of other colleagues, with the final respondent not minding to talk to colleagues who ask questions.

The overall picture that emerged of the community members who participated in the workshop, revealed a broad range of roles and experiences within the community, a very positive feature when attempting to gain a more rounded understanding of community needs. Moreover, almost all participants had access to the internet, and indicated a sufficient level of basic computer literacy. Since only one person indicated prior experience with digital stories, the training provided by CIECT was intended to expose community members to new skills and competencies which they could then pass on to others.

6.2 Facilitator Observations

During the workshop, there was a need for the visibility and engagement of the CIECT

facilitators in terms of continuous guidance, support and training for the community participants. The facilitators noted that the participants were enthusiastic and committed to the workshop. There was no need to probe participants, as they were fully aware of their community needs and how to convey these needs by making use of the digital stories, through the training they received. It was thus observed that, considering the short time-frame of the workshop, the participants expressed a level of self-directed learning, especially in relation to the stages of conceptualisation, design, development and presentation. It is also important to note that most of the participants did not speak English as their first language (all digital stories were done in English except for one that was created in isiXhosa, an indigenous language). This once again highlighted authenticity and passion regarding the community needs.

During the course of the three-day workshop, participants engaged in peer-to-peer collaboration and exchanges. They shared their experiences with each other and further discussed the nature and relevance of their stories and community needs and proposed possible solutions. It is through such constructive activity, which is simultaneously independent and shared, that the most effective learning takes place according to Sociocultural Constructivism. Moreover, as discussed earlier, the building of relationships and the tapping of existing skills and competencies is central to ABCD, and this can only be done through a hands-on engagement by facilitators during the learning process. A further advantage was that facilitators observed an increase in confidence among the participants as they engaged during the workshop, relating to the gaining not only of skills (since most had no experience with digital stories), but of skills application as well, culminating in the completed digital stories. It should be emphasised that the execution of this digital story workshop is a complex intervention, involving collation of non-linear activities, including stakeholder management, planning, design, development, facilitation and more importantly, relationship building.

6.3 Participant Experiences

During the first two days of the workshop, participants were asked to provide feedback on their learning experiences twice each day via an online discussion forum. Furthermore, the

participants were expected to complete milestones (learning activities related to the final creation of their specific digital stories). On the morning of the first day, participants were asked to reflect on the specific community sector they represented, their expectations for the workshop, and what they believed the aims of the workshop were. Thirteen (13) responses were received. At the conclusion of the same day, participants were asked to identify the focus areas and community needs they wanted to work with, and why this was important to the community, with 16 responses received.

During the course of the second day, participants provided feedback on the planning and storyboard phase of the workshop, and 14 responses were received. Finally, at the end of the day, participants were asked to reflect on application and contextualisation, and apart from stating their final digital story topics, they provided a short overview of the community needs and possible solutions they identified, to which 15 participants replied.

While the community needs and the proposed solutions will be discussed in greater detail in the next section, the perceived aims, expectations and feedback regarding the structure of the course and its delivery will be investigated here. Relatively few participants (four out of 13, 30.77%) specifically remarked on the perceived aims of the workshop, but these accurately reflect the intentions of CIECT in the delivery of the course: (i) *"I think the aim of this particular workshop is to identify community needs, through the digital story telling. To educate, learn and to understand the needs of the different communities present here"*²; (ii) *"to teach us some new e-skills and at the same time to tell more of our community needs"*; (iii) *"that we can gain skills regarding how to tell a digital story...To put a message across for other people to understand your story"*; (iv) *"to give us the skill so that we as the students can go back to our communities and make a difference"*.

Expectations varied, but most (11 out of 13, 84.6%) stated that they expected to learn how to become proficient in the use of digital stories. Two participants expected to gain other ICT skills as well, with the first wanting to *"learn more about the use of computers in general"* and the second – a member of the South African Police

Service (a communication officer liaising within schools) – *"about an accurate manner of voice and video recording"* as well as to *"be able to take photos, videos during violent protests"*. This clearly expresses the practical nature of the skills demand that the training workshop intended to address, as well as its need and value among community members.

One response revolved around the expectations of the delivery of the course material by the CIECT facilitators, specifically with skills transference in mind: *"I expect that the information given to me should be clear and understandable, so that I can teach the youth and fellow facilitators [colleagues in a rural development project] how one can tell their digital story"*. Finally, some stated broader expectations: *"My expectations of this workshop is to become a better leader for those who have no voice...I want to learn to not just be a helpful person but a people person as well...I want to be brave and bold"*. Others were hopeful that the course would go some way to address the needs of the community. For instance, one remarked that their expectations included *"that this workshop will also be able to open some doors for job opportunities especially for the youth taking part in it"*. However, this participant did conclude by hoping that the result of the telling of digital stories by the community members themselves would be to *"claim ownership of their failures and successes"*.

Thus, it is evident that while some participants were especially hopeful for the course, they nevertheless had realistic expectations, and the facilitators delivering the course maintained that, in line with ABCD, community members must retain responsibility for the development of their communities. This was also the reason for the emphasis placed throughout the course on finding solutions to address community needs from within the community, by starting with the assets and skills already present, and building on and sharing these.

Of the 14 responses received on the second day regarding the planning and storyboard phase, all 14 reflected positively on their experiences of the delivery of the course. In particular, all participants stated that the process of storyboarding and planning assisted them in focusing their digital stories. Several responses went beyond this however, ranging from critical thinking – *"Planning further helped me to think more critically regarding the focus of my story"* – to the acquisition of skills beyond eTools – *"This*

² Where necessary, the authors have corrected grammar and spelling in the participants' comments, without altering the original meanings.

session gave me planning skills". While no more questions specifically asked participants about the structure of the course, the scaffolding approach used by the facilitators, and the allowance made for planning and encouragement of critical thought, was touched upon by one participant: *"I must admit it proved quite intimidating but interesting at the same time hence I enjoyed the experience and knowledge gained in the process"*.

From comments made at the conclusion of the second day, it is visible that the goal of fostering relationships and connections between community members from different sectors working towards the common aim of developing their communities was succeeding. From their discussions and collaborations, participants had identified commonalities between the needs they identified, and these also became clear in the analysis of their input and digital stories, discussed below. Some feedback addressed this point in particular: (i) *"My colleague and I have similar problems and it blends into one another"*; (ii) *"I think it [the focus area] is very well aligned to my colleague's area as well"*; (iii) *"My colleague's focus points (Economic challenges) went well with mine"*; and finally (iv) *"My colleague is also focusing on the Education part of their community, but not the same needs and solutions"*. From the 15 responses at the end of the second day of the workshop, seven (46.7%) expressly identified areas of commonality with their colleagues. It was encouraged that these would spur professional relationships lasting well beyond the workshop, to ultimately strengthen bonds between different community sectors.

6.4 Community Needs Identified

From both the online feedback and the finished digital stories themselves, four main focus areas were identified into which community needs were concentrated, albeit with some overlap. These were youth, health, economy, and substance abuse. Nine out of 16 focus areas (56.25%) directly involved the youth. While these individual focus areas differed, the common thread of concern for the youth was evident. Three of the 16 focus areas (18.75%) concern healthcare challenges in the community, while five (31.25%) concern unemployment and the need for skills development, although two of these overlap with other areas (Unemployment vs Drugs and Youth Unemployment). Substance abuse was the final major area of concern for community members, with eight (50%) raising this issue, albeit again with overlap.

The following individual focus areas were identified by the community members: Community Development and Drugs Abuse, Proper Sanitation, Economic Challenges, Unemployment vs Drugs, Health, Community Development (Sport), Skills Development, Health Issues, Youth Unemployment, Youth Development, Educational Needs in Our Community, Education Development, Job Creation in the Community, Sports Issues, and Teenage Pregnancy and its Effects in the Community. The overall picture that emerged of the needs present in George (bearing in mind that participants specifically represented the George Thusong, Thembaletu, Conville, and Waboomskraal communities) reveals a serious concern for the youth and their prospects to find stable employment, along with keeping them motivated with positive activities. One participant also remarked in the online feedback that *"there is more to life than just working on a farm"*, and expanded on this in the digital story by saying that for many in the community with a high school education, the only employment prospect is to work as a labourer on a farm, where working conditions are difficult. This suggests that for many, employment prospects are limited and limiting, even when present. Substance abuse is another serious concern, particularly among the unemployed youth, and is ultimately inseparable from a lack of economic opportunities and constructive outlets such as sport. Moreover, a lack of healthcare facilities (especially after hours and on weekends), improper garbage disposal (including illegal dump sites) and a lack of sanitation (one online feedback response indicated *"only one tap for over two hundred people"* in a specific area) constitute major community needs.

As one of the participants noted in online feedback, the problem is compounded in some cases since *"for each five families in the area there's one toilet"*, and coupled with a tendency for many people to *"dispose their waste [garbage] in any open area they find"* it is inevitable that *"many people get sick"*. For these households, basic sanitation thus remains a vital need, and when coupled with the comments of another participant, that *"In the area that I am living there are minimal health facilities"*, it becomes clear that basic health services are a serious community need.

The digital stories produced by the community members, as cultural constructs or artefacts and "things to think with", contain within them

transformative potential unlocked by their power to spark debate, discussion and critical consciousness [6,5]. In line with Sociocultural Constructionism and ABCD, by creating their digital stories and gaining skills in the process, by building relationships with others in the community, and by recognising their prior skills and talents as the starting point, the participants have strengthened their power as change agents in the continuing struggle to transform, uplift and empower their own communities. Identifying solutions to the needs present in these communities was thus an important aspect of the training offered by CIECT.

6.5 Solutions Suggested to Specific Needs

A crucial aspect of workshop was that it encouraged community members to consider their own ideas for addressing the needs they identified. While the digital stories themselves will be shared with local Councillors and other community leaders, this cannot lead to real community development unless driven in a bottom-up fashion. Participants took up this challenge however, and all suggested constructive solutions. In discussing these proposed solutions, the areas of commonality identified previously will be used again. Moreover, while not all participants discussed their solutions in the online feedback, these will be incorporated here to expand on the input from the digital stories.

In the area of youth needs, one solution revolved around sport as a means of combating youth frustration and creating opportunities for constructive outlets that equip the youth with life skills. Specifically, the creation of sports grounds and clubs, and counselling and rehabilitation services by Government was suggested. Another participant linked up with this and suggested sports facilities, as well as the creation of youth leadership programmes to meet the challenge of developing the youth and equipping them with skills. Fostering closer bonds between parents and the community was also an important element in this strategy. Another digital story also emphasised communicating as a community and finding out why children are skipping school, and then establishing community support programmes for these children. Job creation also ranked high as a priority, and it was suggested that an eCentre be established within the particular community from which the participant came, given the distance to the nearest eCentre.

This emphasis on eCentres and eSkills was shared in several digital stories, and one noted the value of computer skills and training given to youth. This particular digital story focused on unemployed youth and drug abuse, and suggested a community-based organisation that would assist with rehabilitation and development of self-esteem. A greater level of engagement with local and provincial government was also suggested. Another digital story connected with the eCentre theme in addressing educational challenges facing the youth, and also called for a computer centre in the local community, especially to enable school learners to do research and type their assignments. This particular story was made by a community member working in a rural child and youth development project, and also called for a qualified special needs teacher to equip the facilitators in the project with skills to work with special needs children, to unlock all the talents present in the community. This story also placed emphasis on motivating the youth, for example through talent shows, to keep them focus on positive activities.

The theme of fostering closer community ties was also evident in a digital story about the effects of teenage pregnancies. The suggested solution emphasised that early childhood development needed to be undertaken *“to avoid these young minds from falling prey to all the social ills experienced by their peers in the outside world”* and for communities *“joining hands with law enforcement agencies”* to combat crime and substance abuse where they occur.

The establishment of youth centres ranked high for another participant, who also connected the provision of sporting opportunities for youth with the benefits of the training and commitment it can instil. This particular digital story also emphasised the provision of mentoring opportunities for the youth, and in the online feedback the creator of the digital story said *“I want to help and give back to the communities...I'm here to make them [the youth] believe, dream and help them to achieve what they set their minds on. Believing and having faith in them is what matters most. I want these children to succeed and overcome all their fears in life.”* It is unmistakable that there was a genuine passion for uplifting their communities among the participants in the workshop, and in this case was also coupled with a strong sense of personal responsibility.

Another digital story addressing the youth emphasised the provision of life orientation to youngsters as a possible solution to a lack of skills and focus among some of the younger members of the community. The story also placed importance on the community 'turning up' and providing skills and information to the youth, and to break out of a cycle of blame. Indeed, the participant spoke of not blaming a lack of education or absent parents, but filling this void with guidance and information to those who need it. This is a clear illustration of ABCD – focusing not on what is absent from a community, but what assets already exist and can be harnessed by the community members themselves.

eCentres again emerged in another digital story as important locations for disseminating skills and information among the youth, thereby maximising their chance to find better employment opportunities. A central aspect to this is the suggestion that Government provide additional bursaries and information regarding opportunities for the youth. While it was not specifically suggested that better public transport be provided, this same digital story mentioned that a lack of transport to study and work areas limited the opportunities available to the youth in that particular community. The creator of this story was also the participant who mentioned that many youth end up working on farms, and who expressed the hope that they find better work opportunities and conditions.

Among the digital stories dealing with healthcare needs, the first proposed empowering the community with information to combat unhealthy living conditions. Two avenues for this were suggested, namely religious institutions (specifically churches), and eCentres. The creator of the digital story also emphasised the importance of informing the community about the eCentres and the opportunities present there. The second digital story dealing with health and proper sanitation focused not only on improper waste disposal, and food handling techniques, but also on sanitation. The response to needs in these areas centred on informing the public, especially those in the food service industry, to help prevent bacteria in food and cross contamination from causing illness. Interestingly, the digital story also showcased a solution in progress, taking the form of a community clean-up programme, which has been in place since 2010, and which helped to convert a dumpsite into a community park. This participant also emphasised community collaboration, and

through the example of the clean-up programme, showed how this can work in practice, and what can be achieved as a result. The final digital story touching on the area of healthcare specifically discussed problems resulting from the very limited health services available to community members. In particular, the lack of clinics operating during evenings and weekends was a major concern. Moreover, the shortage of staff and lack of motivation limits the operations of clinics in the area. The suggested solution by the community member was that a twenty-four hour clinic should be established where dedicated and motivated staff can take care of healthcare emergencies.

On the themes of substance abuse and economic challenges, it was highlighted by a participant that the high unemployment rate contributes to community members abusing drugs, alcohol and other substances. This feeds into the high crime rate within the area. The suggested solution is that the community members should receive skills training at the eCentres. Hence, the eCentres can play a role in the provision of training to community members. This links to a suggestion by another participant that building additional information facilities can contribute to employment and economic development. Moreover, eCentres can play a role by marketing their services more widely to the community. It was also suggested that sport clubs and rehabilitation programmes should be strengthened to assist with the youth unemployment and substance abuse. A final suggestion on meeting economic challenges was to equip people with entrepreneurship skills so that they become self-sufficient and create job opportunities for others.

6.6 Outcomes and Skills Gained

At the conclusion of the training workshop, participants were asked to complete a course evaluation form (post-survey). This posed four interrelated questions regarding participant experiences and learning outcomes, with all sixteen participants responding to all questions. The first question asked whether the participants attained any eSkills whilst engaged in the workshop, and all sixteen respondents (100%) replied yes. One referred to prior knowledge and stated *"I have attained eSkills prior to this workshop, but I did learn something new."* This emphasises that during any training intervention, it must be kept in mind that no learner is an 'empty vessel', and all come with prior

experiences, knowledge, talents, perspectives and needs unique to them [25]. Flexibility is thus an important facet of training, and skills development.

Another response reflected on the continuous nature of the learning process: *“yes, although I am still in a learning process”*. Six respondents simply stated yes, while the remaining responses included: *“I have attained eSkills in the workshop that will help in the future”*, *“Yes I did attain some very helpful eSkills which will help me in future,”* and *“Yes I have and am very grateful for your help.”*

The second question explored whether digital stories were considered an appropriate tool by the participants to express their community needs. All of the participants (100%) stated that they found it to be appropriate. One response emphasised the multimedia aspect of digital stories: *“I think it was a very appropriate way to express the community’s needs, because it’s not only what people hear but they can also see what is going on in our community.”* Another focused on the shareability of the final product: *“The digital story eTool [was] very much an appropriate tool that will assist many of our communities in exposing to the public equally the good and the evil things taking place within our communities and be able to share those with the rest of the world in the most appropriate and convenient manner.”* Another emphasised ease of use: *“Yes, once you understand the e-tool it is very easy to formulate your story. It looks very nice and neat.”*

The third question posed to participants focused on whether the workshop enabled them to connect with others in their community, and if so, whether those links could enable them to contribute to the development of their community. Thirteen replied yes (81.25%), and three replied no (18.75%), a strong indicator that the training course succeeded in meeting the requirement of both Sociocultural Constructivism and ABCD, namely to foster a fruitful relationship between community members, and to create learning environments where shared constructive learning activities could take place. Some of the responses that addressed this point in particular included: *“Yes, I have done research and community members were eager to help. The links will help to contribute/give back to my community”* and *“Although I haven’t started making use of the skills I am convinced that this would contribute immensely to the*

communication network in sharing our experiences as a community.” Of the three responses indicating that the workshop had not enabled them to connect with others, two simply stated no, while the third indicated the lack of eSkills in the wider community as an impediment: *“Not really because there are some community members who don’t really understand these types of things but I do think that in future I would contribute very well to the development of my community”*. However, this again emphasises the need for, and value of, skills-transference and awareness campaigns between the workshop attendees and their community sectors.

The fourth and final question focused on this point in particular, and asked participants how they would apply digital stories in their sectors. While [26] cautions that questions about future intentions are unreliable predictors of behaviour, this question nevertheless succeeds in gaining insight into the perceived value and applicability of the eTool. The majority of responses (9, 56.25%) focused on the transferral of skills and knowledge: (i) *“I will show others how to do it also”*, (ii) *“To engage the others and teach them”*, (iii) *“By teaching the people how it works and how important it really is”*, (iv) *“I will apply this tool in my community by transferring the skill that I have gained in this workshop by helping others in my sector.”* The remainder of the responses focused on using digital stories in projects, to share personal stories, and to spread awareness: (i) *“I can use it to convey different stories”*, (ii) *“I’m currently job hunting but still active in the community and yes I will apply it to all my projects I work with”*, (iii) *“Will use it to make our community leaders more aware of the problems within the sector.”*

These responses indicate a highly positive outcome, and suggest that CIECT’s design, development, and delivery of the Digital Story workshop was successful. All participants reported gaining skills through the workshop, and all believed digital stories to be an appropriate tool for expressing their community needs. Coupled with the observed increase in participant confidence, the post-survey suggests that the choice of a digital story to highlight community needs was a sound one, in line with the theoretical approach, due to its multimedia nature and ability to create a connection between individuals via the sharing of stories. While not all participants believed that the workshop allowed them to connect with others in their community, the overwhelming majority did, and suggested

several constructive avenues for applying digital stories in future. These were centred on the sharing of the skills they have gained, and the sharing of stories to raise awareness, suggesting that the digital story and the skills it fostered do indeed enable participants to connect with others in their broader community.

Apart from the skills gained, and confidence developed, the participants also took away Certificates of Completion, and reports issued by UWC. These stated they had completed all tasks and achieved the learning outcomes successfully, and were hand delivered to them by the Cape Access Management Team after the workshop.

7. CONCLUSION

This paper set out to reflect upon a recent Digital Story Community Project undertaken by CIECT in George, in collaboration with several stakeholders. This Project was a follow-up to CIECT's ongoing and successful Digital Inclusion eCentre Manager Training Programme, and consisted of a three-day workshop provided to community members identified and selected by eCentre managers in the George area. Participants (community members) represented vulnerable sectors in their communities, and used the digital stories to share the most pressing needs confronting members of their sectors, as well as the proposed solutions to address these. These stories in turn will be shared by CIECT with community and Government leaders in the area, to take up the needs and solutions identified.

As for the 16 participants, they were drawn from the Waboomskraal, Thembalethu, Conville, and George Thusong areas, and identified needs clustered around four interrelated themes: youth, economic challenges, substance abuse, and healthcare. A broad range of solutions were suggested. In brief, these included the provision of sporting facilities and clubs, youth leadership and community support programmes, and rehabilitation programmes for substance abusers. Calls for the provision of early childhood development services and a qualified special needs teacher were also issued, along with the motivation of the youth through talent shows for example. Several participants also called for closer community collaboration and cooperation, and building stronger bonds between the community and parents, and the community and local and Provincial Government. eCentres were

a crucial factor in the provision of skills training and facilities for school learners and tertiary students to conduct research and complete assignments. It was also noted that eCentres can market their services more widely to the community given their potential impact. The provision of information to community members ranks high in combating unhealthy living conditions, as did a twenty-four hour clinic with full staff compliment.

Two important points can be drawn from the participants' digital stories. Firstly, many of the participants showed a very high level of concern for the wellbeing of their communities, and displayed an unmistakable passion for finding solutions to the numerous and urgent needs confronting these communities. Indeed, for some participants this had already translated into action and implementation, and the establishment of a community clean-up programme and a child and youth development project are examples of these. This is encouraging, particularly when considering that ultimately, community development must be driven in a bottom-up manner to be sustainable. Secondly, it is notable that many of the suggested solutions rely on government interventions. The provision of additional bursaries and information about opportunities by government, as well as the creation of sports grounds and counselling and rehabilitation services are examples of these. This again emphasises the need for, and importance of, a bottom-up development approach, and holding government accountable.

The theoretical approach to this project was that of Sociocultural Constructionism, and ABCD. These are, as was discussed, an excellent fit for the use of the digital stories, as it constitutes an individual and shared constructive activity that resonates with the culture and social environments of the creators. Of particular importance, the making and sharing of stories is a potent contributor to the development of critical consciousness and social change, challenging the dominant narratives in the community and demonstrating the transformative power of individual community members as active change agents. An important component of this is the acquisition of skills (particularly eSkills), transferable to the community at large. From the participants' feedback, it is clear that the George Digital Story Community Project succeeded in strengthening the skills of participants, in a manner they agreed was appropriate. Moreover,

from facilitators' observations it is also noted that the confidence of participants grew throughout the hands-on workshop, not only in the use of digital stories, but also in the telling of their own stories, an essential component of critical consciousness.

8. RECOMMENDATIONS

Recommendations flowing from this Project are four-fold. First, from the solutions proposed by the participants (community members), it is clear that eCentres can play a significant role in enskilling communities and disseminating information. The continued roll-out of eCentres to more communities, and the active marketing of their services (and thus the continued training of eCentre Managers in effectively doing so), is therefore highly recommended. Second, it is recommended, and expected, that participants will transfer their new skills, both within the context of the organisational practices within their sectors, and within the broader community. In the modern global economy ICTs are ubiquitous, and all communications skills and digital media competencies are valuable, especially in terms of improving employability. Third, it is strongly recommended that community and government leaders consider carefully the needs identified by community members in these digital stories, once they are shared by CIECT, and that they take all possible steps in addressing these. However, as one participant noted, closer ties between Government and the community are needed, and therefore this cannot be pursued in a detached, top-down manner. Fourth, the use of digital stories in identifying community needs, in a theoretically sound manner, is recommended in future research focusing on community development. It is no longer possible or desirable to speak on behalf of communities, particularly in relation to their development needs, and digital stories have shown themselves to be a highly appropriate tool for obtaining authentic data, while enabling the acquisition of skills in the production process.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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APPENDIX: PRE- AND POST-SURVEYS

1: Pre-Survey/Learner Profile (Participants were expected to complete this prior to engaging in the workshop)

Dear Participant,

It is important that we are equipped with some analytical information about you as you will be expected to engage within online and offline environments for the Digital Story Community Workshop. Your commitment to complete the following information regarding Access to resources; Skills/eskills, competencies and attitudes and Team work will enable facilitators and coordinators to collate a comprehensive analysis.

Personal Details

Please state your Name and Surname and which sector you are affiliated with?

What role do you play within your community?

Access to Resources

1. I currently have:

- A. A computer at home with internet access.
- B. A computer at home with no internet access.
- C. No computer at home
- D. Mobile phone with internet access

Skills/eSkills, Competencies and Attitudes

2. Can you copy/paste between different documents and applications?

- A. No problem!
- B. I think so. I'll ask someone to help.
- C. I don't know.

3. Do you know how to save files and upload attachments?

- A. No, not at all.
- B. I think I could do it.
- C. Yes, easily.

4. Prior to this workshop, have you created a digital story?

- A. Yes
- B. No

Team Work

5. Are you willing to actively engage with others during workshops (face-to-face/online)?

- A. I do not spend a lot of time with colleagues on a course. I prefer to do my work.
- B. I generally find it interesting to find out about the work and perspectives of other colleagues.
- C. I don't mind talking with colleagues who ask me questions.

2: Post-Survey (Participants were expected to complete this course evaluation form after the workshop)

Have you attained eSkills whilst engaging in the workshop?

Is the digital story eTool an appropriate tool to express your community needs?

Did the workshop enable you to connect with others in your community?

If yes, will these links/networks enable you to contribute to the development of your community?

How will you apply this eTool in your sector (work-place)?

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