trends in higher education

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Decision Making in Shifts to Online Teaching: Analysing Reflective Narratives from Staff Working in African Higher Educational Institutions

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Abstract: Many higher education institutions moved from in-person to online teaching during the COVID-19 pandemic, but these shifts have a longer history and potential. They require challenging individual and collective decision making by staff, beyond their usual repertoire of practice. This paper, therefore, aims to understand the nature of decisions that staff made as they moved to online teaching, the reasons, processes, and reflections on the perceived impacts. Eighty-four participants with diverse roles connected to moving online from four institutions across Africa were purposively sampled. Using a constructivist paradigm and qualitative approach, participants were invited to describe decision-making experiences through short narratives with prompts around their context, decisions, and impacts. Twenty-two of these participants attended a workshop to augment the narrative data and identify good practices. Qualitative analysis directed by Activity Theory concepts revealed that decisions related to policy and rules, pedagogy, community, and technology were frequently cited by participants. The main objective expressed in these narratives was maintaining the continuity of education for students. However, mixed impacts were observed on student engagement, and further decisions were made in response to this. Common challenges related to tools and technology, and similarly, the biggest tension for implementing the decisions was found between tools and technology and the participants or their communities. Good practices include updating policies and introducing continuous assessment. Implications for reflective professional practice are discussed, including how previous practices are initially drawn on to try to reproduce in-person teaching online but then adapt in recognition of the tensions this raises.

Keywords: online learning; blended learning; decision making; activity theory; reflection; institutional change

Citation: Coughlan, T.; Goshtasbpour, F.; Mwoma, T.; Makoe, M.; Aubrey-Smith, F.; Tanglang, N. Decision Making in Shifts to Online Teaching: Analysing Reflective Narratives from Staff Working in African Higher Educational Institutions. *Trends High. Educ.* **2023**, *2*, 123–139. https://doi.org/10.3390/higheredu2010008

Academic Editor: Alina Schartner

Received: 25 January 2023
Revised: 10 February 2023
Accepted: 15 February 2023
Published: 16 February 2023

1. Introduction

Shifts towards greater use of online teaching have become a common theme in higher education institutions (HEIs) worldwide. As well as responses to the COVID-19 pandemic, online learning is expected to fulfil goals of greater flexibility, resilience and digitalisation, and discussions of blended or hybrid learning are widespread. Yet, for many staff, this represents a substantial departure from their usual working practices, and while they may be able to find external examples and guidance, the specifics of their contexts will influence the decisions that are possible and which would be effective.

Addressing these issues, this paper focuses on understanding the decisions made by staff when moving online and how these relate to their roles, rules, tools, and communities.

We collect and analyse data on decisions made by staff at four HEIs based in Ghana, Kenya, Nigeria, and South Africa, all well established and with some experience with online or distance learning prior to the pandemic. The aim of this sample is not to compare the institutions but to increase the breadth of perspectives available for analysis.

We also explore the evolving nature of decisions and the reflections that emerge from observable impacts, which could influence longer-term practices. Building on this, we highlight contradictions and tensions that exist in shifts to greater online teaching and consider how decisions and experiences can develop the practices and understanding of staff as reflective professional practitioners.

Decisions in HEIs are made at different levels, from senior management, educators, and administrative and technical staff. In this study, we gathered reflective narratives from staff in a variety of roles across the four institutions and used workshops with a subset of these staff to augment and make appropriate use of this data. To understand individual decisions in context, we analysed this data according to the elements of Activity Theory [1].

To understand change and promote development, we encouraged reflection from participants through the methodology. The pandemic took education professionals beyond their comfort zones and led to experiences and conditions which should form part of the understanding they bring to their future practice. This could be enhanced by reflection-on-action [2], which we aimed to promote through narrative creation and workshop activities.

This project was inspired by a rapid professional development programme launched in the wake of the pandemic lockdowns [3]. With over 1000 registered participants from 16 African countries and over 600 attendees in some sessions, there was clearly high demand for professional development around online teaching. We recognised that educators, professional staff, and senior management all faced challenging decisions. Contextual factors such as institutional policies were often discussed as barriers, alongside practical concerns such as adapting courses to suit online study and limited connectivity. While participants reported improved confidence and understanding through taking part, we recognised that we did not fully understand the decisions they were making or how these were being made.

New uses of technology may challenge staff expectations or be a tool that leaders seek to use to enact wider change. Compared to other teaching modalities, online teaching tends to lead to different forms of collaboration, and these shifts can produce tensions between staff in different roles [4]. At the same time, motivations to enhance online teaching may be limited (e.g., [5]). Decisions made during pandemic responses provide valuable opportunities for reflection on teaching and institutional practices, but it is not clear how these responses could become part of the realisation of longer-term visions or, indeed, changes of direction and mindset. We, therefore, discuss these findings with a focus on issues that could impact the longer-term development of online teaching in higher educational institutions.

2. Literature

To ground this research, we first summarise relevant literature on shifts to greater online learning, with a particular focus on African contexts. We then connect this to the current understanding of the individual and collective decisions, actions, and reflective practices that occur as these shifts in teaching modality are made.

2.1. Shifts towards Greater Online Learning

Forms of blended and fully online learning first spread when the potential to study at any location with Internet access was recognised. Literature describe some use of online and blended learning in African universities from the 1990s, along with barriers to growth [6,7]. In Kenya, for example, a survey study [5] highlights limited internet connectivity and the high costs to access this beyond campuses. They also found a lack of recognition for staff teaching online and busy workloads from competing tasks. There were limited training opportunities and negative attitudes from some staff and students, but also continuing

reasons for universities and the government to encourage online learning, in particular, to fulfil the high demand for university places.

The pandemic brought greater impetus to shifts online. However, pandemic responses differed from longer-term developments. In a systematic review of the literature, Bond et al. [8] found that pandemic responses predominantly focused on the use of synchronous collaboration tools, with video conferencing replacing in-person teaching sessions. In contrast, online teaching usually focuses more on the upfront design of materials and asynchronous forms of learning and engagement. Assessment tools were mentioned less frequently than in the pre-pandemic literature; where they were discussed, the literature often raised concerns, such as inflexibility, connection barriers, and concerns around cheating and the use of proctoring services. It is also recognised that sudden shifts online caused inequities for learners with limited access to ICT, and a lack of preparedness with digital technology may have further contributed to this [9].

Little of the research reviewed by [8] represents African HE. However, a survey by eLearning Africa & EdTech Hub [10] provides perspectives from African professionals. While noting diversity across countries and education sectors, common obstacles to distance learning for students were limited access to technology and study materials and that students' home environments were unsuited for studying. For educators, limited training and infrastructure were key issues. Pandemic responses were expected to have longer-term impacts, but positive attitudes towards harnessing technology again come with concerns about an increased digital divide. A study of university students and facilitators in Rwanda raised similar findings but also highlighted how financial crises create additional barriers, and that while students and facilitators were positive about online study in principle, most could not engage properly with it [11].

A study comparing school remote learning strategies by region found that television, radio, and paper-based home study played a larger role alongside Internet-based delivery initiatives in Sub-Saharan Africa compared to Europe and Central Asia [12]. Their case studies in Nigeria and Kenya show how access to devices and internet connectivity needs consideration for initiatives to succeed. South Africa has been highlighted as a country with particularly high digital inequality, with limited access to devices and more sharing of devices among family members, impacting time for study, and again a lack of digital skills [13].

Further research has explored the perspectives of senior HE managers around the world on the pandemic-related shifts to online study, and the potential for longer-term change. HE leaders associated the shifts online with opportunities for more personalised and lifelong learning but highlighted the necessity of actions to address inequalities, such as providing access to laptops, partnering with companies to provide consistent internet access, addressing the distribution of domestic and family responsibilities that particularly affect women studying at home, and supporting students to live in university residences if their home environments are unsuitable for study [14].

2.2. Action and Reflection in Decision Making

Moves to online teaching in response to challenges, and longer-term digital transformations, can be understood through the reflections of the individuals involved, who make decisions based on their knowledge, experiences, and previous reflective thinking [15]. Professionals often enter processes of reflection in response to unexpected situations [2] (p. 56). Such actions are focused on enacting change according to the domains of knowledge they prioritise and the repertoire of prior experiences they can draw on [2] (p. 148), yet responses to these surprising situations should also entail experimentation, hopefully broadening their understanding and repertoire.

Reflection in and on action has been argued to be a feature of effective pandemic responses, with one study finding that Japanese educators with less online experience used more reference points from past face-to-face teaching when they encountered problems, while those with more online teaching experience could mobilise wider reference points

to adapt to the situation. However, the less experienced did, through reflective practice, become more optimistic and capable of exploring the wider potential and possibilities of online teaching [16]. A further investigation of whether pandemic-related responses by South Korean educators replicated their past practices or redefined teaching for the online modality found that most made only modest revisions. However, their behaviours and use of technology did change, as did, to a lesser extent, their beliefs about the potential of online teaching. Factors correlating with greater change included the technology acceptance and innovation propensity of educators, the fidelity of institutional support, and the media synchronicity of their course [17].

Professional reflection requires the potential to experiment and learn by exploring or testing the consequences of decisions, for example, through imagining scenarios, sharing narratives, and piloting new approaches [2], but these activities require time, skills, and resources. In this research, the individual self-narrative and collaborative workshop-based methodology was devised to encourage reflection on action by the participants. This could both elicit data relevant to the research questions and offer opportunities to reflect, which could be valuable to participants given the unusual circumstances and pressures they had been working through in pandemic responses.

2.3. Organisational Structures and Collaboration

Reflection on action is a useful lens to understand individual staff members' decisions and development, but we must also recognise that the socially constructed nature of individuals' repertoires, models, and priorities will influence and constrain their decisions [2]. In education, particularly online education, professional activities are often highly collaborative, situated in, and constrained by structures and context of the institution and wider society. Pre-pandemic literature provides insights into approaches to online and blended teaching beyond rapid responses, including that the collaborative working approaches found in most online and distance learning are a significant departure for educators at institutions where in-person teaching is the standard. Instructional or learning designers, and technical and media specialists, usually work alongside educators to provide the skills required to produce quality online teaching [18]. These approaches can create tensions due to the different backgrounds and roles of staff involved and increased formality and workload compared to a solo course convenor model [4]. Different forms of contributions from diverse staff can enhance online courses and teaching, but there is a need for staff across roles to develop confidence so that these contributions can be effectively made [19].

The relationships between individuals and their environments are mutually shaping. The decision maker is affected by social systems related to their immediate setting, which are acted upon by institutions of society, including government policies, workplace practices, informal social networks, and others. Larger scale social, political, and economic systems interconnect to influence these institutions as well [20,21]. To represent the interaction between individuals, their contexts, and their decision making, an Activity Theoretical lens was used for analysis in this research. Researchers have found Activity Theory a useful lens to understand interactions with technology [22] and institutional systems from multiple perspectives and levels of power [23].

Activity Theory was also applied by [24] to analyse interviews with educators on the use of online delivery during a period of shutdowns and student protests in South Africa in 2015–2017. They describe how staff faced new experiences of top-down rules where there had previously been autonomy. Like many other institutions, there were some pre-existing provisions for blended learning, with a Learning Management System and recording of lectures. However, staff were aware that a sudden increase in expectations for online study could exacerbate inequalities, and given that protesters wanted teaching halted, this could create negative associations. Negativity also arose around the tools that were available because the institution-wide response did not effectively consider subject-specific teaching issues. This study highlights the impacts of both personal decision making and of contextual factors when online teaching is employed as a responsive strategy.

In summation, moves towards online teaching usually require substantial change for individual staff and in the institutional approach. Multiple actors in an institution play important roles in these changes, so their differing perspectives and development must be understood. Most studies have focused on staff in a particular role, such as teaching faculty staff or senior management, yet collaboration across roles needs to be understood and is a gap. Institutions and their contexts vary, and there has been limited analysis within institutions in African countries. A focus on decision-making processes and staff reflections on these can provide a richer lens to add to how we currently understand these changes across staff in an institution and over time.

3. Materials and Methods

This project was guided by the following research questions:

RQ1: What challenges did universities' academic and support staff experience in delivering online and blended learning?

RQ2: What decisions did they have to make in order to teach or support students online?

RQ3: How did they make such decisions?

RQ4: What kinds of impacts did these decisions have?

RQ5: What good practices can be identified in relation to common decisions?

Our research follows a constructivist paradigm, inviting staff to explain in their own words their decision-making experiences in the context of shifting to greater online learning. In the initial stage, participants shared narratives of their own decision making. After this, workshops supported participation in the analysis of the data and the creation of a professional development resource to communicate guidance and suggestions of good practice around common types of decisions.

By creating narratives and later discussing decision making in workshops, the participants were invited to recall and examine actions that had previously occurred. While these decisions may have been made under pressure at the time, the method aimed to provide space for reflection on action to occur and a structure of prompts to guide this.

3.1. Sample

A purposive sampling approach was used, with a local representative in each of the four institutions creating a list of staff roles that made decisions on the delivery of online teaching (e.g., management, teaching, IT, and student support). This helped us to address institutional differences; for example, an 'instructional designer' role existed for two institutions while the other two did not have this. Then, each representative invited a sample across these roles to take part. Potential participants were sent an invitation email with information about this project. They were then briefed by the local representative and asked to record their narratives.

Eighty-four narratives were received from across the four institutions. These comprised 25 narratives from University A (Ghana), 24 from University B (Kenya), 27 from University C (Nigeria), and 8 from University D (South Africa). Thirty-two participants were female, and fifty-one were male, with this data not available for one other participant. Twenty-two attendees joined the first workshop. While there were challenges to capturing a similar number of narratives from University D, those received were rich and diverse enough to provide good insights and were supplemented by the workshop activities in which a group of University D staff were strongly engaged.

3.2. Narrative Prompts

Participants were asked to record a 2–5 min audio response to a set of prompts. The audio narratives are pragmatic tools that support reflection-in and -on action [25] and "enable participants to talk through their experiences and engage in a reflective dialogue related to their lived experiences" [26]. The prompts covered:

- Context: Describing your role, the main activities that you do, who you work with, and the essential tools or processes.
- Your decisions: Describing 2–3 important decisions that you had to make in connection with online and blended learning.
- Impact: Reflecting on the impacts these decisions had and on whom.

Participants were given guidance on some simple ways to record and share their audio narratives with the project representative in their institution. To make the study design accessible and inclusive, participants were informed that they could provide a written response if they faced challenges recording audio. The guidance provided is included in Appendix A.

3.3. Workshops

When consenting to record a narrative, participants were asked if they would consider joining optional workshops. After collecting narratives, a two-hour online workshop was run where an initial phase of analysis was presented, and discussion activities were held related to each research question. These included staff from each of the four institutions involved in the data collection. A further workshop was held to support the co-creation of a professional development resource but was considered out of scope for this paper since it made use of the findings rather than adding to them.

3.4. Approach to Analysis

The narratives and the first workshop discussions were transcribed and combined for analysis using Nvivo qualitative data analysis software.

The transcripts were analysed by two members of the research team in two phases. In the first phase, all transcripts were thematically analysed using the five elements of Activity Theory (i.e., subject, tools, rules and regulations, community, and division of labour [1]). Like [24], our subjects were staff whose object was to use online teaching to enable education of students. The actions described by staff and the tools, rules, and community and contextual contradictions were coded, with new codes created to capture the themes that existed under these categories. The analysis identified ways in which these elements created tensions in the objectives of staff in delivering, teaching, and supporting students. This analysis was used to identify challenges staff experienced, types of decisions they made, the impacts of their decisions, and which good practices could be identified in relation to these.

The workshop was used to introduce participants to this coding using definitions and examples, providing a collaborative way to check for agreement and prompt further enhancement of the quality of the analysis. The quantification of instances of codes found in the data (shown in Tables 1 and 2) is only intended to be indicative and forms only one part of this collaborative, qualitative, and constructivist process of analysis. Therefore, seeking or testing inter-coder reliability is not considered necessary [27]. It could, however, be useful in extending the research where this aimed for quantifiable comparisons across settings. In the second phase of analysis, 24 narratives (6 from each institution) were selected using the criteria that covered a variety of roles and contexts and contained rich information or critical situations. Then, the activity system for each of these narratives was drawn (e.g., see Figure 1) and the actions involved in the activity, and relevant tensions were specified to understand how the decisions were made. In the end, a constant comparative method was used to draw conclusions.

Table 1. Challenges identified in the thematic analysis. Overarching themes are shown in bold and sub-themes indented.

Challenges	Instances (N)
Tool- and technology-related	**72**
Connectivity and electricity	49
Devices, software, and hardware	21
Open Educational Resources	2
Subject-related	**58**
Digital literacies and training opportunities	18
Connectivity (for the participant)	19
Motivation and engagement with online education	10
Workload and lack of time	6
Access to devices	5
Community-related	**58**
Access to technology and the internet	29
Motivation and engagement	14
Learning	3
Support staff and support departments	7
Staffing	5
Pedagogical design- and delivery-related	**30**
Assessment and feedback	12
Instructional and learning designs	10
Facilitation and communication with students	4
Practical activities	4
Rule- and policy-related	**8**
Institutional policies and procedures	8
Challenges related to division of labour	5

Table 2. Types of decisions identified in the thematic analysis. Overarching themes are shown in bold and sub-themes indented.

Types of Decisions	Instances (N)
Rule- and policy-related decisions	**55**
Pedagogical decisions	**39**
Instructional and learning design	11
Module and course delivery	8
Facilitation and online communications	7
Assessment and feedback	5
Synchronous online teaching	4
Students' motivation and engagement	2
Supervision	2
Community-related decisions	**25**
Tool- and technology-related decisions	**23**
Platforms	11
Devices, software, and applications	9
Electricity and connectivity	3
Subject-related decisions	**20**
Digital literacies and professional development	17
Access to devices	3

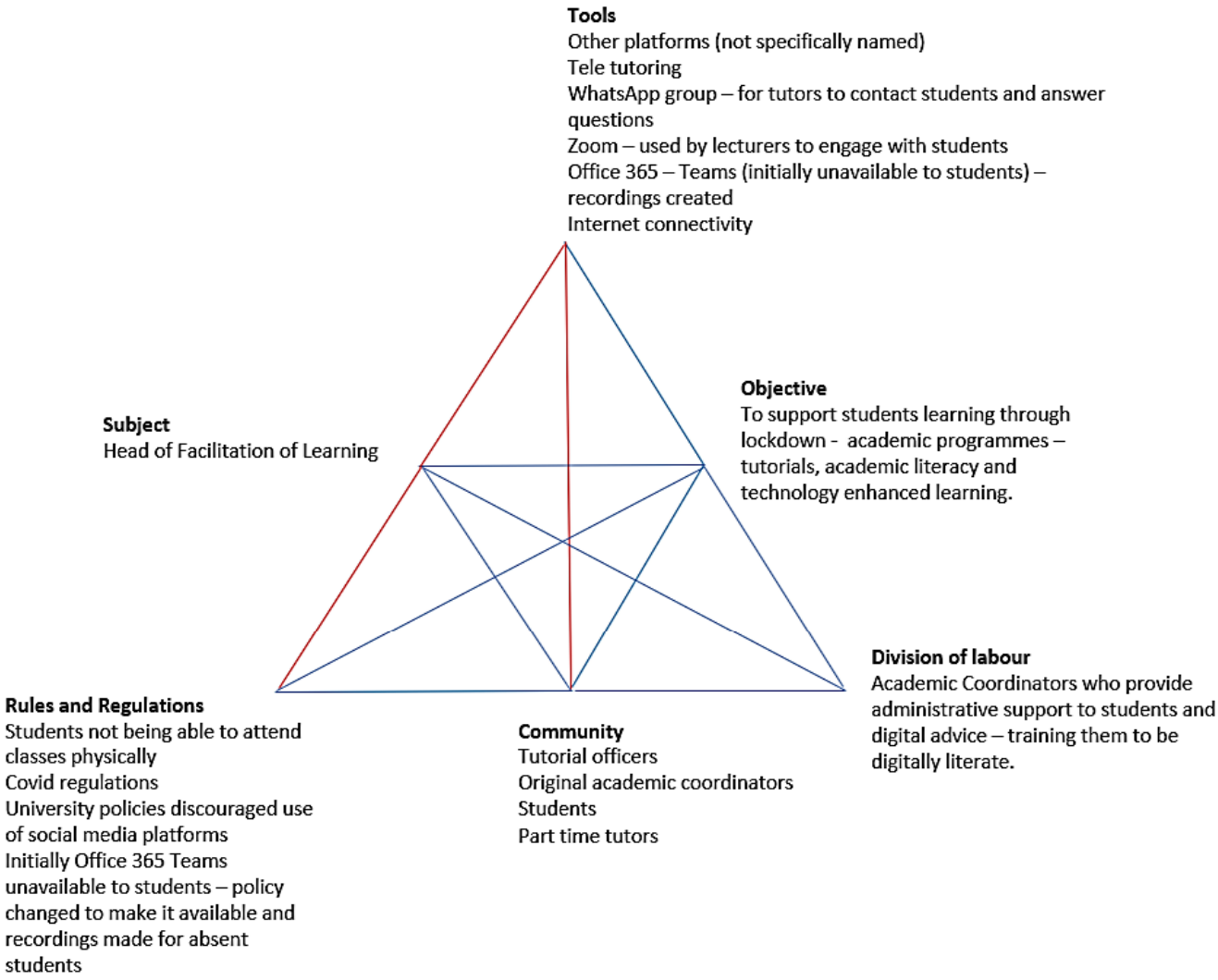

Figure 1. Example Activity System based on a participant narrative (Head of Facilitation of Learning in university D).

4. Results

In the following sections, participant quotes are attributed by the institution code (A, B, C, or D) and then the unique identifier of the narrative or 'Workshop'.

4.1. Challenges Experienced

The analysis highlighted tool- and technology-related challenges as particularly common (see Table 1).

Within this, connectivity and electrical supply were the most common themes, with devices, software, and hardware also mentioned frequently. This aligns with findings [10,12], where limited technology and connectivity are key barriers. Participants, for example, lamented that both

> "students or myself have challenges with internet interruption which sometimes affects the lectures" (A-1).

While access issues have been evident worldwide in reporting shifts to online learning, there are context-specific differences in areas such as the limitations on electricity supply and the costs of internet access. Inequalities within the student population, and between institutions, were highlighted, with one participant stating, for example, that

> "the university is not giving us (data) bundles, even though . . . in other universities . . . students were given bundles so are able to be online" (B-12).

In terms of the model of professional reflective practice described by [2], participants expressed a lack of existing repertoire of situations and knowledge that can be directly applied to the work now required, for example:

> "it was my first time delivering content online so the challenges were those of how best do I communicate, how best do I use the time allotted to deliver (the) substantial amount of content . . . in a manner that is understandable to at least a significant proportion of the student body" (C-12).

Similar issues were raised from different perspectives. Educators described challenges around a lack of digital literacies, both for themselves and students, while staff in senior management positions highlighted the barriers they found to providing training, which itself was usually conducted online, and thus required some existing digital skills. There was a wide disparity, with some reporting training to be inadequate while others described training that was extensive and which had prompted major changes in their thinking and practices.

There were also challenges to the ability to deliver due to limited staffing and clarity of roles. Participants related to how support departments and staff-skilled areas such as graphics production were not available. Conversely, senior management participants reported that they were dealing with staff concerned that the move online may lead to their jobs being lost. Managers also noted that a lack of digital skills led to delays in designing or delivering teaching, and the rapid nature of the shift online limited the time to try out technology or implement solutions.

For most participants, the community in which they worked encompassed students and colleagues, and most challenges related to students. The motivation and study skills required for online learning was seen as distinct from those needed on campus. Several reasons were perceived to account for low attendance, including that students were not prioritising study, as well as facing connectivity and access barriers.

This was further compounded by a sense that some students and activities were not suited to online study. Staff faced quandaries as to whether or how activities, such as working through feedback on written work or practical demonstrations, could be made effective online. One lecturer noted that the "full Zoom lecture model" was challenging for teaching accountancy calculations, so they needed to adapt to new ways of providing notes, examples, and recorded explanations for students to review (A-10). While there was an awareness that teaching methods could be changed, many narratives express a lack of comfort in doing this, at least initially, for reasons including the unknown impacts it would have, their beliefs in the value and primacy of face-to-face teaching, and the substantial workload of devising and implementing effective changes to teaching.

4.2. What Decisions Were Made?

The analysis found that rule- and policy-related decisions were most often mentioned, and that these were a major focus of decision making across roles and institutions. One of the reasons these were so commonly mentioned in relation to decision making is that even if an individual was not directly responsible for a policy-related decision, policies and rules substantially affected the character of many decisions they were making.

Each of the four institutions made a central decision to move teaching online, in some instances prompted by government decisions to restrict or close campuses. It took time to develop and approve new policies and revise existing ones, such that the institution could effectively support online teaching. The activities to achieve this involved and impacted multiple groups within the institution; for example, a Blended Learning Policy that was:

> " . . . required to inform the technicalities of delivering programmes . . . (and) informed the roles of the various players on how to leverage the blended learning

> approach in delivering their programmes . . . This (was) developed by the Digital School, but the policy was approved finally by the Senate" (B-5).

Assessment was particularly problematic but also resistant to change, with decisions made to reduce or modify in-person exams, changing how these were managed to meet pandemic-related restrictions rather than immediately changing policy so that assessment could move online. Where online assessment approaches were used, these often appeared tentative, with an emphasis on evidencing the authenticity of the student rather than considering the substantial redesign of the assessment itself. This again appeared to reflect the constraints of policies and rules which emphasised in-person exams as a gold standard of assessment.

Training initiatives were another key area of decision making for senior management. Lecturers with online teaching experience were recruited to provide insight to colleagues, and recording and observing teaching were used as a means of peer learning. In other cases, policy-related decisions defined processes for monitoring and assuring the quality of online teaching, such as through recording and reviewing synchronous teaching sessions. Adapting to a situation where teaching activities could no longer be monitored in person, recordings were also used as proof that teaching had been delivered.

Teaching staff had to make pedagogical decisions in complex and unfamiliar situations, alongside shifting policies and ongoing training initiatives. While they were not able to apply all of their existing repertoire of teaching practices, they maintained similar objectives and continued to apply their pedagogical knowledge to the decisions they made, navigating institutional tensions and changes to their workload. Their narratives relate a growing understanding over time of the issues that arose as they translated their teaching to an online modality, but sometimes this was at a different pace to institutions. One related how they faced constraints both from policies and from requirements to use only university-managed and -approved systems but noted that they "had to sometimes bend some of the rules and policies" and were lucky to have senior management members on their side when this caused tensions with staff in other units (D-2).

Adopting an online teaching strategy was considered essential because without it, students were "probably abandoning education" (B-21) and losing their routines and willingness to study. At the same time, the perception that students were less engaged online prompted decisions in areas such as the adaptation of materials for online delivery. For example, educators made more graphically rich materials and encouraged engagement through quizzes. There was a parallel focus on communication and facilitation, such as using instant messaging tools with groups of students for continuous contact and reminders of upcoming events or deadlines. Some reported that this concern with engaging their students led to a change in their way of thinking:

"no longer teacher-centred but learner-centred, and thus trying to motivate my students to participate in sharing knowledge and be in control of their learning" (D-6).

4.3. Objectives of Decisions

Drawing on a detailed analysis of a subset of 24 narratives, as well as the overall analysis described above, several layers of objectives can be understood. First and foremost, maintaining a continuity of education for the students was the primary reason for expanding online teaching during pandemic-related lockdowns. For some, online teaching was only ever conducted out of necessity, for example stating that

> "it wasn't an interesting thing for me. I had to accept to be trained . . . because I had to teach students online" (B-20).

Attempting to maintain a status quo of teaching through this rapid and dramatic change of modality led to a range of areas for urgent decision making. These included the technological, infrastructure and digital literacy barriers to students and staff connecting, the lower engagement of students away from the campus and the usual study routines, and the difficulties in maintaining existing approaches to the assessment of students and the

accountability of staff. Senior management participants also recalled the need to address resistance and fear of change in their workforce by bringing staff onboard with the decisions made and reducing their concerns about job losses.

The activity system represented in Figure 1 shows an example where the objective of continuity for students is linked to several tensions and evolving decisions. Tensions between tools and the institutional rules and regulations were a key theme in their narrative, with a recognition of the potential to use tools, including WhatsApp, which was not permitted, and Microsoft Teams, which was initially unavailable to students, to enhance engagement between students and staff. At least in the case of Microsoft Teams, rule changes were enabled so that eventually this became available to students, helping to meet the original objective, but with a greater focus on providing the tools that could effectively engage students than had originally been the case. Other issues, such as the affordability of data and limits to internet access for some students, were recognised but not resolved in the scope of the narrative they shared.

These concerns could have been responded to by either assuming an eventual return to the previous normality or committing efforts to develop approaches more suited to online teaching. The challenging tensions described in the narratives would lead a listener to assume that a return to in-person teaching would be welcomed, given the difficulties of keeping the community connected when many students and staff faced connectivity barriers. Yet, waiting for normality to return was not seen as a viable option. Indeed, there is little mention or implication of returning to pre-pandemic approaches anywhere in the narratives. Instead, new objectives were either found or came to the fore that link the core aims and values that the staff have to the new modality they found themselves working in. For example, staff understood from their past experiences that it was essential for students to engage and communicate. Recognising that this had become limited in their initial moves to online teaching, many narratives focused on the objective of improving online engagement by identifying and trialling new communications strategies and tools.

4.4. Perceived Impacts of Decisions

Participants were also asked about the impacts they perceived their decisions had, and responses revealed impacts on students and their learning, course delivery, staff, and the institution.

Reported impacts on students' learning were more nuanced than just continuity of teaching. For example, decisions to move online meant that students "have not lost much academic time" but staff could still see an "impact on their academic performance" (B-15). A mixed impact was seen on student engagement, with the perception that some students engaged better online than in person, both in synchronous sessions and text chat, but for others, attendance was irregular. Staff were aware that some students faced barriers to accessing the platform but perceived others as not attending even when apparently able to. Some speculated that this was due to disrupted routines or changes to students' priorities when they were not on campus.

More positively, some students were enjoying access to wider learning resources, such as open or publicly available materials, and had greater flexibility in how they accessed learning with elements such as recorded videos or interactive content available at any time. Improvements in digital literacies and study skills were also recognised, as "students become conversant in the use of digital tools, many of them for free or cheap", which they could continue to use in their work and study (A-2).

A sense of improved credibility and visibility was gained where teaching was able to continue and be enhanced during lockdowns, given other institutions had instead paused. At the same time, there were substantial financial implications to some decisions and splits in staff opinion, with one participant noting how blended learning was "embraced by some students and lecturers, but on the other side there are those who felt it is not the way to go, and it can be seen as a double-edged sword" (B-18).

Impacts on staff workload were also mixed, with participants reporting that they were overworked with new activities related to online teaching, leaving less time for research, while others noted that new approaches had reduced the time needed in areas such as marking and facilitated new approaches to sharing the workload. For example, "those who have the advantage of having more resources are able to share . . . we're able to share tutors, we're able to share facilitators . . . we can just meet online, and the students are able to be supported . . . that also increased collaborations a lot . . . we can no longer work in silos" (B-Workshop).

4.5. Good Practices

Practices perceived to have a positive impact were identified in narratives and further explored in the first workshop. There was a general reflection that the experiences had led to insights being gained, and an increased focus on online as a teaching modality for the longer term, rather than just as an initial pandemic response, meant that "we are being more creative, adding new things to it and it's better now" (C-15). There was also a sense of pride expressed in some of the narratives, considering themselves ahead of others in the sector.

A key area of good practice was changing the approach of assessment to include more continuous and formative assignments. This was seen as a valuable response to the challenges of engaging and being aware of students online. Participants in the workshop want to "keep people constantly engaged" (D-Workshop) and to "put the students always on their toes . . . so that they can keep abreast of what you are teaching them" (A-Workshop). Rewards for engagement were also considered important, such as awarding a small portion of marks for engaging with course forums.

Proactive communication and responding flexibly to challenges faced by students were also highlighted. There was an awareness that good online teaching practices need to accommodate students who, for example, may have limited or unreliable access. Recordings of lectures, developing and sharing materials in advance, and alternatives for assessments were all seen as positive. At the same time, structured timetables and consistent notifications of events were considered important to engage them effectively with their online study.

Good practices were also considered to include focused efforts on updating policies and guidance so that they enabled staff to use technologies appropriately. This responded to tensions where staff would use services such as WhatsApp, knowing that they were outside of accepted policy but that they were widely used and familiar to students.

Initiatives to ensure staff could work remotely, such as providing appropriate laptops and covering the costs of Internet access and data, were considered essential to ensure that they did not face barriers to completing their work.

Narratives highlight the importance of planning for change and welcoming the potential to develop new skills. Being "prepared to change and to move on with life" (B-19) may be easier for some than others, but there were also ways that institutions attempted to encourage this, including bringing in technologically literate alumni to build confidence with current students and addressing the concerns of staff who believed they might be replaced by highlighting the continued importance and value of their core skills in an online teaching context.

5. Discussion

The proverb 'Necessity is the mother of invention' has been frequently used in literature about online teaching and the pandemic (e.g., [28–30]. What has been less clear is if and how nurturing these initial responses with individual and institutional efforts over time will result in deeper change and new, mature models of online teaching. Alternatively, long-standing contextual barriers, such as limited internet access, may lead staff, students, and institutions away from online teaching when it is no longer the only means to achieve their objectives.

The use of Activity Theory as a lens for analysis prompted a focus on how the individuals' objectives and actions are mediated by their community, tools and the rules they are expected to follow. In our discussion, we highlight some of the tensions between these components. As well as supporting recognition of immediate issues that were addressed through staff narratives, a focus on reflection helps to highlight tensions that could impact the longer-term development of online teaching.

5.1. What Tensions Occurred in Decision Making as Teaching Moved Online?

The most common tensions observed were between the tools used and the community or the subject (the participant) themselves. These tensions relate to major issues in the existing literature: limited connectivity, access to appropriate technology, digital literacies, or student engagement meant that tools such as videoconferencing platforms, which could support teaching over a distance, often failed to fully do so. Staff recognised that this only partially met their objective of continuity of teaching, and further decisions needed to be made.

Looking deeper into the way in which the participants aimed to use tools to engage with the community, the narratives show that, in line with [8], the pandemic response had a focus on synchronous teaching, with participants for example framing this as a move to "virtual classes" (B-6) which transfer the campus-based pedagogy into an online form. However, building on the findings of [10,12], which give insights into the specific challenges faced in African institutions, it is clear that the replication of campus-based teaching models can deepen inequalities of access due to the barriers raised by high-bandwidth, time-dependent teaching strategies.

Using the concepts of Schön's (1983) reflective practitioner [2], substituting online classes for in-person ones could be seen to be attractive because it allowed staff across roles to make use of more of their existing repertoire of practices, such as timetabling, delivering, or observing lectures, rather than moving to more unfamiliar asynchronous models of teaching. As [4,18,19] highlight, producing courses for asynchronous online teaching is a step into the unknown for many staff and usually requires different roles and collaborative relationships to be established. With time, however, the narratives show growing awareness that this synchronous online model heightens the tensions stated above by demanding students to connect at specific times and with substantial use of data. Educators showed that they were responding to this as their strategies evolved, for example stating that:

> "when I started my classes, two or three times I switch on the video so that they could see that I'm serious and I'm on duty and I'm there for them. Then to save on bandwidth I switch it off but continued engaging." (B-22).

Taking a broader view, the potential for and barriers to communications in online teaching held many contradictions. Tools such as instant messaging apps opened the potential for more communication between staff and many students than had previously been the case, while simultaneously, usual ways of engaging with students appeared degraded or impossible. A group of related tensions were between institutional rules and the community or tools. The use of mainstream social media tools that were most familiar was often discouraged or banned, yet staff perceived these as the most likely mode of communication to reach many of their students. Further tensions in policies were perceived around assessment, with a desire from staff to develop continuous models of assessment and reduce reliance on exams coming up against the policies of institutions and governments, which focused on verifying student identity and avoiding cheating rather than best assessing what students had learnt through the online modality.

Some forms of change take substantial time, and meanwhile, narratives outlined contradictions arising from this, for example, that the existing assessment rules and pandemic-related policies for online exams were incompatible. Where [24] highlighted contradictions between the rules set by university management and those argued for by protesters, in the pandemic response, even the policies of the institution could become contradictory. They also ran counter to the intuitions of staff and the ways they wanted to apply their

knowledge to best support learning. However, there was evidence that such problems were being resolved as approaches to online teaching matured.

Less explicit in the narratives but also an important area is tensions between subject and community, relating to concern for their jobs, roles, and the division of labour. In some cases, there was a lack of staff available to support tasks that would allow the achievement of objectives, for example, support in producing graphics for a course. There were also contradictions across descriptions of the ways in which workload and division of labour were impacted by moving online. Online teaching could reduce the importance of staff's geographical location and, therefore, allow the staff to support their colleagues in other locations, but it also generated more work, particularly in achieving an effective and mature online teaching model.

5.2. What Tensions and Opportunities Will Impact the Longer-Term Development of Online and Blended Learning?

The narrative suggests ways in which experiences from pandemic responses will influence future directions. While participants were prompted to talk about their recent decisions, their responses tended to show longer-term thinking, featuring plans that were in progress and ambitions that they and their institution held. While there were tensions around staff motivation and fears for jobs, aligning with research conducted before the pandemic (e.g., [5]), there were also positive views of what could be achieved as initial moves to online teaching matured. Where [14] found senior management seeing the potential of shifts online to enact institutional change, this study found that staff across roles felt that the shifts could have longer-term benefits in areas such as pedagogical approach and collaborative working across the institution.

This paper adds to previous work that has found small but generally positive impacts from pandemic experiences on the propensity of educators to make innovative use of online teaching [16,17]. The narratives suggest that the experiences gained were positive enough to widen the repertoire of these professionals and become part of the practices they take forward in their future decision making.

Of particular interest was the remarkably little sentiment or desire for these changes to be revoked for a return to post-pandemic normality. This may be because the studied institutions already had some distance or online learning provision prior to the pandemic, but a shift from a responsive change towards maturity is evident. Narratives expressed a common pattern: from mirroring in-person lectures online to deeply appreciating the wider opportunities for online engagement using multiple communications channels, media-rich materials, and a wider range of resources that can support more self-directed learning.

Assuming the objective of teaching online for continuity recedes, other motives and tensions, such as the individual reward and training for developing innovative practices will impact the extent of longer-term change. Initiatives and policy-related changes to address tensions in areas such as assessment will need to continue, and the narratives emphasised how different departments, roles, and committees needed to drive, input, and agree to change. While participants were prompted to talk about their own decision making, they often talked in terms of 'we did'. At the same time, the division of labour required to achieve quality online teaching was often unclear or seen as problematic. This mirrors tensions identified pre-pandemic in [4,18], but these issues can be addressed through better defined roles and collaborative working.

Underlying all of this remains the issues of inequal access and ability to study online from home or other non-campus locations. While there has been some progress in connectivity and access to devices in recent years [6,7,10], there remain constraints to access that participants and their institutions could not easily resolve. Supporting students and staff with initiatives that provide data and equipment was perceived as essential, but other issues, such as lack of connectivity in rural areas and home locations not suited to study or assessments, are harder to tackle. There were, however, notable non-technological decisions that could allow students to overcome barriers, for example, to allow students to postpone

their assessments where learning had been disrupted. In concerted efforts with initiatives to improve access and harness the flexibility of blended models, such approaches could enable online teaching to develop and mature while tackling inequalities.

6. Conclusions

Analysing personal reflections on decision-making actions through the lens of Activity Theory has led us to understand both individual and institutional challenges. The narratives of decision making give a sense of progression from the primary objective of maintaining teaching for students through established practices, then recognising practical challenges and the need for deeper change both in individual approach and in the policies, structures, and initiatives of the institution and society.

This paper adds to a body of research on the experiences of adapting to online teaching, which has lacked a combined analysis of the perspectives of staff across multiple roles in African HEI contexts. As would be expected, some themes are prevalent for staff across the world. The skills and perceptions of staff and students sit alongside practical constraints, connectivity, and access to technology as key barriers and enablers, but the degree and nuance of these are different depending on the circumstances both at the national and institutional level. There is, of course, a far richer diversity of institutions across the African continent than is contained within this sample, so understanding could be enhanced further through the inclusion of different types of institutions beyond those here, who could be expected to have had a stronger foundation for moving teaching online than others would have.

While we managed to gather a wide range of staff voices in the narratives, student voices were only known second-hand through the reports of the staff working with them. In this regard, it could be particularly beneficial to compare the impacts that staff perceived their decisions to have with impacts reported by their students.

As we move further beyond rapid responses, staff will ideally reflect more deeply and continue to develop strategies for online teaching that are appropriate for their students and contexts. This research collected perspectives which look back from a particular point in time, still near to the original pandemic responses, but with enough time having passed to see some evolution of activities and thinking. Future research should explore the longer-term developments and impacts which build on the types of decisions and experiences identified here.

Author Contributions: All authors, led by T.C. and F.G., were involved in the development of the research design. T.M., M.M. and N.T. managed sampling and recruitment of participants. F.G. and F.A.-S. conducted the analysis. The writing of this manuscript was led by T.C., with all authors giving input and feedback during the drafting process. All authors have read and agreed to the published version of the manuscript.

Funding: The Digital Decisions project was funded by British Council under their Digital University for Africa programme.

Institutional Review Board Statement: All subjects gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the Declaration of Helsinki. Ethical approval for this research was received from the Human Research Ethics Committee of The Open University (HREC/3897/Coughlan).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Due to the personally identifiable and institutionally sensitive nature of some of the collected data, and because not all participants wanted to consent to this being shared, the full data set is not publicly available. However, further examples of the data, professional development materials and a report created from the project, are available from the project website: https://www.open.edu/openlearncreate/course/view.php?id=7825, accessed on 10 February 2023.

Acknowledgments: We would like to acknowledge the valued contribution and friendship of our co-investigator Solomon Bonney, who passed away shortly before this research was completed. We

also thank all the participants for the engagement in creating narratives and workshop discussions, during what was still a difficult period for many. We thank all colleagues involved in the planning and organisation of the Digital Decisions and Pathways projects, without whom this research would not have happened.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A Narrative Creation Guidance Given to Participants

Dear Participant,

We would like to invite you to share your reflections about the experience of making decisions about delivering online or blended learning.

We have offered some prompts below, to help you get going, but please feel free to expand on what you think is relevant to you and your context or anything else you think it would be useful for us to know in terms of the decisions you had to make. We would be grateful if you could record and share your reflections with us through one audio recording. Please aim to record between 2–5 min of yourself talking about this. You may use and go through all the prompts below or choose some that you would like to focus your recording on. Options for recording are provided at the end.

Appendix A.1 Indicative Prompts

- Context of your decision: Can you tell us briefly about your role and two to three typical activities you do (i.e., about your role or major activities, the people you worked with, and physical tools or processes that you use for the work)?
- Your decision: Please describe two or three of the most important decisions you have had to make since the beginning of pandemic, which relate to your online or blended teaching and how you have delivered this to students. For each decision, please use the following prompts:
- How did you make the decision? What did you have to consider? What was significant for you about them and why?
- Did anything facilitate your decision? If yes, what was it?
- Were there existing policies or choices that had been made that influenced your decision?
- What challenges did you face?
- What good or useful practices have you identified as a result of making these decisions?

Impact of your decisions: Did these decisions have any impact? If yes, what kinds of impacts did they have? On whom?

Appendix A.2 Recording Options

You have several options for recording your narrative. Please choose the one that is most suitable for you.

1. You can use your mobile or any other recording device and send us your audio recording by emailing to [Co-I in partner institution email address]
2. You can write your narrative down and email it to [Co-I in partner institution email address]. If you do not wish to type, you can write it on paper and send us a photo of it.
3. You can use a recording app (such as LIST OF APPS AND FURTHER GUIDANCE) or any other and send us your recording.

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