

## The COTE programme: Creating Opportunities for Quality Online Teaching, an Evaluation

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### Abstract

The Institute of Distance Education's Certificate in Online Teaching for Educators (COTE) is a fully online six-week professional development programme with four modules focused on online course design, digital materials creation, online instruction (teaching and facilitation) and authentic assessment. This paper evaluates COTE's impact on educators' readiness to teach online as observed by the course facilitators and e-tutors. It explores facilitators' and e-tutors' perspectives on COTE's efficacy in improving educators' confidence and competencies for online and blended contexts. The Change Path Model (Cawsey, Deszca, & Ingols, 2016) guided our analysis of change adoption readiness through its stages of Awakening, Mobilisation, Acceleration and Institutionalisation. MCQ and open-ended questions were administered via Google Forms to all course facilitators and e-tutors (12 in total) to elicit their views and experiences with COTE. Questions focused on observed confidence improvements, key learning outcomes and implementation readiness among participants. Thematic analysis was undertaken to indicate how COTE aligns with the Change Path Model, developing educator capabilities and propelling readiness. Facilitators noted gains in online course design, materials creation and assessment. Both facilitators and tutors emphasised growth in learner-centred approaches, showing mobilisation. The findings show that COTE successfully awakens, mobilises, accelerates, and begins institutionalising essential online teaching proficiencies, as the Change Path Model outlines. From the facilitators' perspective, all modules contributed to readiness improvements. While COTE builds baseline proficiencies, ongoing post-graduation support in the form of a COTE online learning community, is critical to sustain change. This programme can become a model for preparing educators' engagement in online instruction.

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### Introduction

The rapid growth of online and blended learning has created a pressing need to prepare educators to teach effectively in digital environments. However, many lack the skills, confidence, and competence to transition their instruction online. Professional development programmes focused on online pedagogies provide a pathway to build these critical capabilities. Yet little research has evaluated the efficacy of such programmes in improving teaching readiness for online contexts.

This study helps address this gap by exploring the impact of the Certificate in Online Teaching for Educators (COTE), a 6-week fully online programme offered by the Institute of Distance Education (IDE) of the University of Eswatini (UNESWA). COTE aims to equip educators

with competencies in core instructional areas like online course design, digital material creation, facilitation strategies and authentic online assessment. It adopts a modular, hands-on training approach. To date more than 350 participants from primary schools, secondary and high schools, teacher training colleges, universities and ministries from within Eswatini and abroad (Ghana, India, South Africa, ...) have obtained this certificate. The programme started in March 2022 after a successful pilot run in November-December 2021 and an official launch in January 2023.

To evaluate COTE's influence on teaching readiness, this study elicits perspectives of course facilitators and e-tutors through a mixed-method approach. It applies the Change Path Model (Cawsey et al., 2016) to assess COTE's role across the progressive stages of change adoption. Key areas explored include observed confidence gains, critical learnings, and implementation readiness among participants.

This investigation provides valuable insights into COTE's efficacy in developing online teaching proficiencies based on facilitator observations and Change Path Model alignment. Findings will inform recommendations for sustaining and extending gains made through the programme. Broader implications speak to professional development models needed to support educators' preparation for rapidly evolving online instructional environments.

### **Literature Review**

Vilppu et al. (2019) found that participating in a short online pedagogical training programme changed university teachers' interpretations of teaching-learning situations, indicating the potential for short online training programmes to impact teaching practices. Marrero (2010) showed that educators found live, online short-courses to be a useful professional development tool, particularly for collaboration and flexibility. Sieber (2005) emphasised the importance of effective online teaching practices, such as focusing on learning processes and student engagement. Others highlighted the significance of well-designed course content, instructor support, and the creation of an online learning community for effective online instruction. Finally, Galikhanov and Khasanova (2019) noted that the success of online teaching depends not only on advanced methods and technologies, but first on the quality of faculty involved. In summary, these research papers suggest that short online courses can effectively enhance online teaching skills by changing interpretations of teaching-learning situations, providing professional development opportunities, emphasizing effective teaching practices, and focusing on course design and instructor support.

For several years, the Change Path model was designed for and applied to management, business, Zhang (2017) introduces a design change model that analyses and searches change propagation paths in complex product systems. Ohvanainen (2014) presents a service business development path framework for industrial companies exploring their service business potential. Smolander (2009) discusses eight types of change paths in systems development practices, providing a theoretical framework for understanding how these practices change.

Applied to education, researchers like Kang (2020) discusses the successful implementation of Kotter's change model in an engineering department, highlighting the iterative and emergent nature of the process, while McKimm (2017) offers 12 tips for applying change models to curriculum design and development, emphasizing the importance of considering various factors and stakeholder engagement.

Cawsey's model is called the Change Path, which is a four-stage model that focuses on process issues and is used as a guiding framework throughout the book. The four stages of this model are: Awakening, Mobilisation, Acceleration and Institutionalisation. The Change Path Model combines process and prescription, providing more detail and direction than Lewin (1947) and less instruction than Kotter (1996). It recommends that managers also use Gentile's 1998 model to act effectively, especially if there is a conflict in values. Duck (1993) reminded us about the emotional impact of change, and Beckhard and Harris (1987) of the power of a well-executed gap analysis. Regarding education, Cawsey's model can be applied to educational institutions that are undergoing change. For example, the Awakening stage can involve conducting a critical analysis of the current state of the institution and identifying areas that need improvement. The Mobilisation stage can involve building a coalition of stakeholders who are committed to the change process. The Acceleration stage can involve implementing changes and monitoring progress, while the Institutionalisation stage can involve embedding the changes into the culture of the institution. By using Cawsey's model, educational leaders can create purposeful change within their institutions.

### Research Questions and Methodology

The following research questions were derived from the overall goal of the study:

1. What impact does COTE have on developing educators' confidence to teach online according to facilitator perspectives?
2. How effectively does COTE build online teaching competencies among educators as observed by facilitators and e-tutors?
3. How does the COTE programme align with different stages in the Change Path Model of transformation?
4. What recommendations do facilitators have for sustaining and extending the changes initiated through COTE?

This study used a mixed-method methodology to evaluate the COTE programme. Google Form online questionnaires were sent to all course facilitators and e-tutors (12 total) to gather their observations and experiences with the programme. The questions focused on three areas: 1) Noted confidence improvements among participants; 2) Key learnings and competencies developed; 3) Perceived implementation readiness.

Participant responses were analysed using thematic analysis to identify patterns and extract insights related to the research questions. Data was coded according to the four stages of the Change Path Model (Awakening, Mobilisation, Acceleration, Institutionalisation) to evaluate COTE's alignment with driving transformation.

Thematic analysis in this study was conducted inductively, allowing themes to emerge from the data rather than imposing preconceived categories. The process involved the following steps:

1. **Familiarisation with the data:** Researchers reviewed the open-ended responses multiple times to gain a holistic understanding.
2. **Initial coding:** Key phrases and sentences were manually coded using a spreadsheet. Each meaningful segment of text was assigned a short label reflecting its essence.
3. **Generating themes:** Related codes were grouped into broader themes such as *improved digital skills*, *increased confidence*, *limited impact* and *structural challenges*.
4. **Reviewing themes:** Themes were refined through iterative review by the researcher.
5. **Defining and naming themes:** Final themes were defined clearly, ensuring they represented the participants' perspectives accurately.

The coding was done manually in Microsoft Excel. No qualitative analysis software (e.g., NVivo or Atlas.ti) was used due to the small dataset size and exploratory nature of the study. The findings synthesize facilitator perspectives on COTE's influence in building online teaching proficiencies. Results inform recommendations for sustaining change adoption, highlighting needs for ongoing support and community. The qualitative approach provides rich, descriptive data on COTE's efficacy from an insider viewpoint.

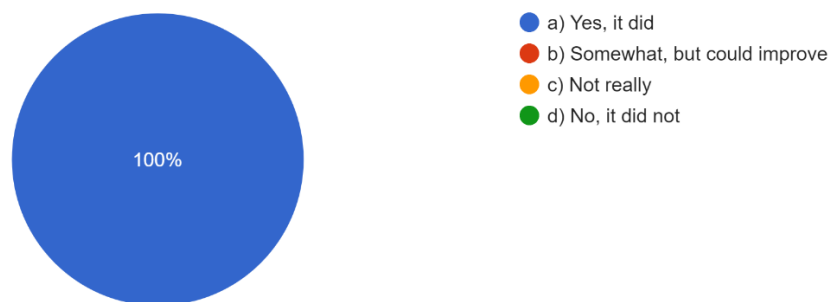
## Findings

Only 6 out of a possible 12 participants responded. This, of course, makes generalisations difficult (see study limitations section).

Here are the questions and the respondents' answers:

1. In your opinion, did COTE efficiently provide the intended online and blended teaching skills?

6 responses



All respondents agreed that the programme provided the participants with much needed online and blended teaching skills.

2. To what extent did COTE improve educators' competencies in online student assessment?

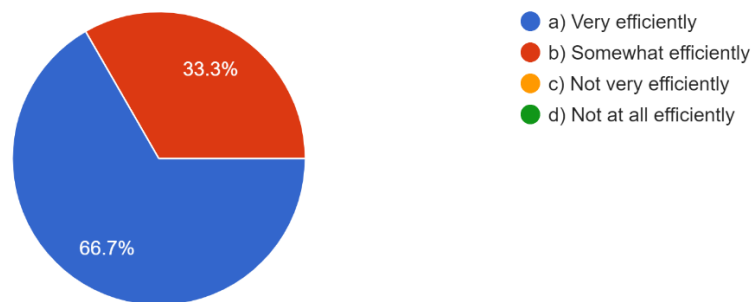
6 responses



Similarly, all participants reported that the programme improved educators' online assessment skills to a large extent.

3. How efficiently did COTE build educators' abilities to create digital materials for online teaching?

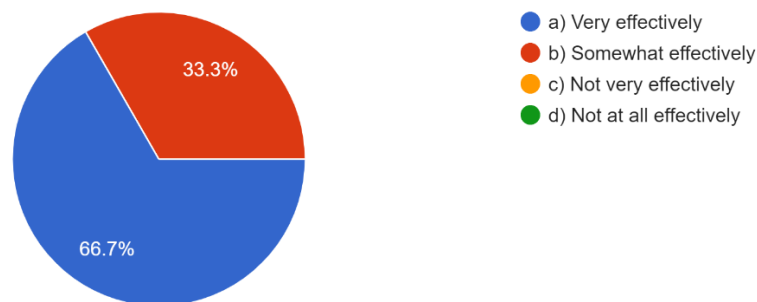
6 responses



The answers to the above question 3 were divided. Two respondents thought the programme somewhat efficiently built educators' abilities to create digital materials while four were more positive and rated the efficiency as high.

4. How effectively did COTE improve educators' skills in designing online lessons?

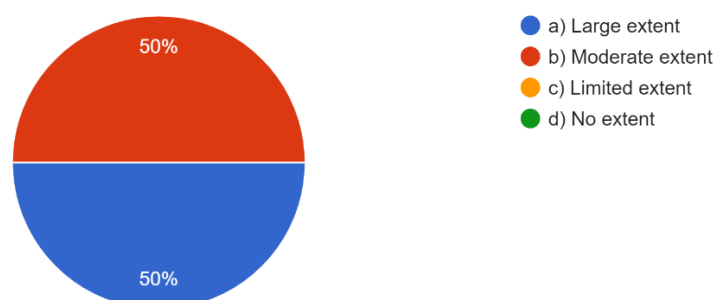
6 responses



Two out of six participants indicated that the COTE programme was not fully effective in improving educators' online lesson design skills. Four were of the idea that this was done effectively. Overall, the responses showed that all six saw improved skills when it comes to designing online lessons.

5. To what extent did COTE build educators' competencies in integrating multimedia in online classes?

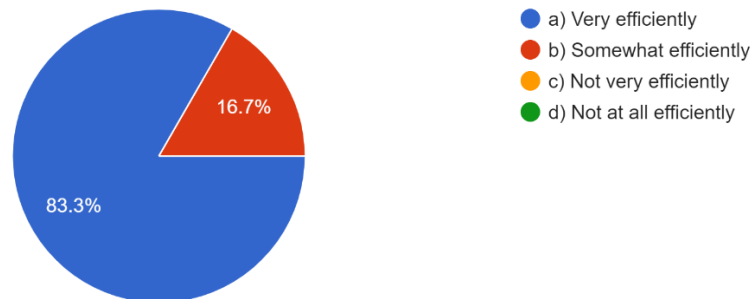
6 responses



50 percent (3 participants) saw space for improvement regarding the integration of multimedia in online lessons and 50 percent (3 participants) thought the COTE programme was successful in this area.

6. How efficiently did COTE develop educators' capabilities to hold virtual classes?

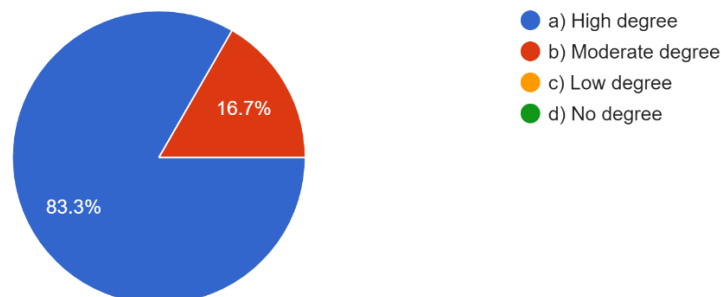
6 responses



5 out of 6 respondents responded that according to them, the programme developed the COTE participants' skills to hold online classes. One did not fully agree. Nonetheless, all were of the opinion that the programme had a positive impact.

7. To what degree did COTE improve educators' competencies in facilitating learning online?

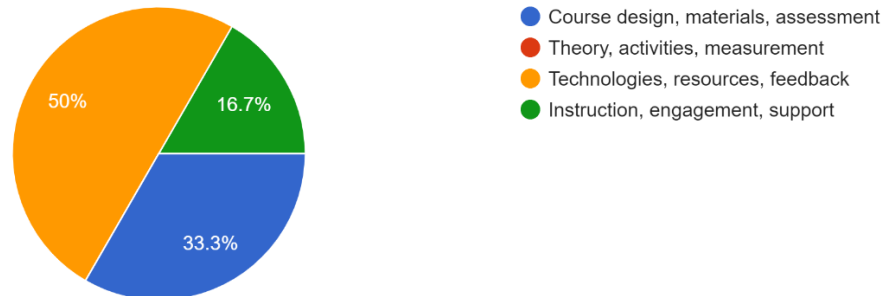
6 responses



A similar response was obtained regarding facilitation skills. The research respondents were in agreement that facilitation competencies were improved through the COTE programme, to a high or moderate degree.

8. What areas do you as facilitators and e-tutors feel educators have made the highest overall gains after participating in the COTE programme?

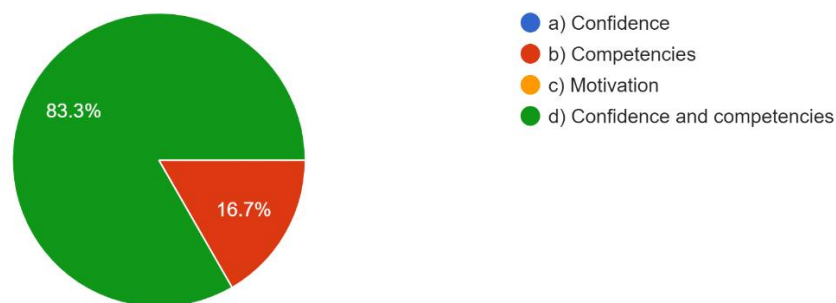
6 responses



Opinions were divided about the main gains. 3 respondents found the benefits of the programme overall lie mainly in the fields of technologies, resources and feedback. 2 felt course design, materials and assessment had the biggest impact, and 1 respondent thought instruction, engagement and support were the most important advantages of the programme.

9. Which aspect of teaching readiness did COTE aim to improve?

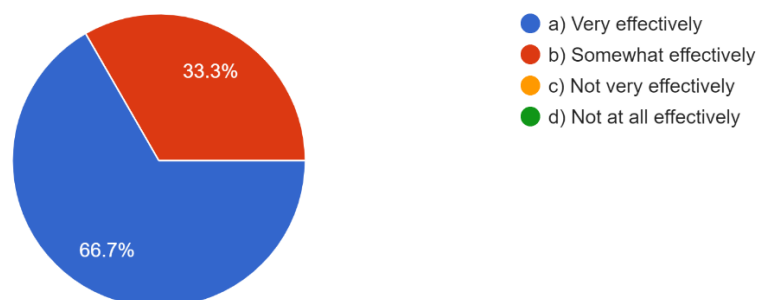
6 responses



According to the study respondents, the focus of the COTE programme is to improve competencies alone (1 answer) or confidence and competencies (5 answers).

How effectively did COTE build educators' skills in designing authentic assessments for online contexts?

6 responses





In response to the final multiple-choice question, 10, two thirds stated that educators gained skills in designing authentic online assessments in an effective way, one third felt it was only somewhat effective in assisting educators to design authentic online assessment.

In addition to these 10 multiple choice questions, there were 5 open-ended questions to find out what the participants' views were on the key benefits of the COTE programme for developing online teaching readiness, what they observed in terms of evidence that showcased improved educator confidence, which of the four modules of the programme they felt was/were most beneficial to the learners, and which improvements they thought necessary. Finally, a last question looked for participants' recommendations as to the best way to ensure skills implementation by the educators who took part in the COTE programme.

Three respondents provided some key benefits of the COTE programme for developing online teaching readiness, namely competencies in designing an online course, using digital materials, and knowing how to facilitate and assess an online course; improving distant learning and skills for the participants and facilitators; helping educators to integrate blended learning in their teaching. 3 respondents indicated the use of a variety of teaching tools, the improved use of Moodle for teaching and the creation of online lessons for students as evidence of enhanced educator confidence after completing the COTE course. Six responses were collected regarding the most effective COTE modules for giving participants online teaching skills. Four responded that all modules were useful as they build on each other and served different purposes. Two responded that it was module 3 in particular that was most effective in reaching out to an online audience.

Recommendations on how to improve the programme in order to develop educators' online teaching skills even further were received from 4 study participants, namely that more time should be given so that "participants master the skills rather than rushing to submit activities", that more interactive lessons online should be included, and that the programme be developed "into a credit bearing semester course and integrate it into all education programmes within UNESWA". Recommendations on how to ensure that COTE participants implement what they learnt in COTE included the following: "Participants can only implement what they learned in COTE if their places of work use the LMSs [Learning Management Systems]. If not, then the skills will be a waste. It is therefore recommended that participants first check if their environments will allow them to implement the skills from the COTE programme". Other recommendations were "supervised practicals in their [the educators] place of teaching", the need for COTE participants to keep on practicing the skills they acquired, and tracer studies to see how participants are doing once they finish the course.

The table below shows how the participants' responses correlate with the Change Path Model:

Change Path Stage Mapped Theme		Example Extract from Data
<b>Awakening</b>	Recognition of teaching challenges	"We used to rely only on chalk and talk, but now we realise the world has moved."
<b>Mobilisation</b>	Increased awareness & engagement	digital peer "We encouraged each other to use Google Forms for assessments."
<b>Acceleration</b>	Integration of digital tools	"I now use PowerPoint and videos to teach literature; students are more engaged."
<b>Institutionalisation</b>	Calls for structural support	"There's a need for our school to have more devices and stable internet to continue this."



This matrix makes explicit how participant responses aligned with each phase of the model, highlighting the progression from awareness to institutional readiness.

## Discussion

The findings from the COTE programme evaluation show strong connections to the literature review presented earlier in the paper. This discussion examines how the evaluation results align with and extend previous research on online teaching professional development and change models.

### *Relationship to Online Teaching Professional Development Literature*

The findings largely support Vilppu et al.'s (2019) conclusion that short online pedagogical training programmes can effectively change teachers' approaches to teaching-learning situations. The questionnaire responses consistently showed that facilitators observed significant improvements in educators' online teaching skills across multiple domains, with unanimous agreement that the programme provided "much needed online and blended teaching skills." This aligns with Marrero's (2010) research, which highlighted the usefulness of short online courses for professional development, particularly for collaboration. The COTE programme's modular approach focusing on course design, digital materials creation, facilitation strategies, and assessment appears to have successfully delivered these benefits. Sieber's (2005) emphasis on effective online teaching practices is reflected in the positive responses regarding facilitation skills development, with all respondents indicating moderate to high improvement in this area. The study respondents noted evidence of enhanced educator confidence through "the use of a variety of teaching tools, the improved use of Moodle for teaching and the creation of online lessons for students," demonstrating the practical application of skills that Sieber identified as crucial. Galikhanov and Khasanova's (2019) assertion about the importance of faculty quality for successful online teaching is indirectly supported by the recommendations from respondents for "supervised practicals" and continuing practice opportunities. These suggestions recognize that faculty development must be ongoing rather than a one-time intervention—consistent with the literature's emphasis on continuous growth.

### *Change Path Model Integration*

The findings demonstrate clear alignment with Cawsey et al.'s (2016) Change Path Model, with evidence for each of the four stages:

1. **Awakening:** The recognition of teaching challenges was evident in responses indicating that educators initially lacked online teaching skills ("We used to rely only on chalk and talk, but now we realise the world has moved"). This confirms Cawsey's premise that change begins with critical analysis of current conditions and identification of improvement areas.
2. **Mobilisation:** Respondents reported increased digital awareness and peer engagement ("We encouraged each other to use Google Forms for assessments"), showing the building of stakeholder coalitions committed to change—a key element of the Mobilization stage.
3. **Acceleration:** The integration of digital tools was demonstrated in comments like "I now use PowerPoint and videos to teach literature; students are more engaged," reflecting the implementation and monitoring phase of Cawsey's model.
4. **Institutionalisation:** The call for structural support ("There's a need for our school to have more devices and stable internet to continue this") indicates awareness of the need for embedding changes into institutional culture, though this appears to be the least developed stage in the COTE implementation.

This staged progression aligns with McKimm's (2017) findings on applying change models to curriculum development, particularly the emphasis on stakeholder engagement throughout the process.

#### *Focus on Competencies and Confidence*

The study findings indicated that five out of six respondents viewed COTE as improving both competencies and confidence, rather than competencies alone. This dual focus reflects Duck's (1993) emphasis on the emotional impact of change, suggesting that successful professional development must address both technical skills and personal confidence. The findings regarding online assessment skills were particularly positive, with all respondents agreeing that the programme improved these skills "to a large extent." This supports Beckhard and Harris's (1987) emphasis on gap analysis, as the COTE programme appears to have successfully identified and addressed a specific skills gap.

#### *Areas for Improvement*

The mixed responses regarding multimedia integration skills (with 50% seeing room for improvement) suggest that this remains a developing area, consistent with the literature's recognition that different aspects of online teaching have varying levels of complexity and adoption rates. The recommendations for improvement—including more time for skill mastery, additional interactive online lessons, and development into a credit-bearing semester course—reflect Ohvanainen's (2014) service business development path framework, which emphasizes the importance of iterative development and scalability.

#### *Sustainability of Change*

The respondents' recommendations for sustainability, including ensuring institutional readiness for LMS implementation, supervised practicals, continued practice, and tracer studies, align with Zhang's (2017) design change model that analyses change propagation paths. These suggestions recognise that sustaining change requires an ecosystem approach rather than isolated interventions. The recommendation that "participants first check if their environments will allow them to implement the skills from the COTE programme" demonstrates awareness of Smolander's (2009) caution about various change paths in systems development practices, acknowledging that contextual factors significantly influence implementation success.

### **Study Limitations**

This study offers valuable insights into the COTE programme's effectiveness in developing online teaching readiness from facilitators' and e-tutors' perspectives. However, several key limitations necessitate caution when interpreting and generalizing these findings. The primary limitation concerns the small sample size, with only 6 out of a possible 12 participants responding to the questionnaire. This 50% response rate significantly constrains the representativeness of the data and undermines the statistical power of any quantitative analysis. As a consequence, the findings should be viewed as exploratory rather than definitive, providing preliminary insights rather than conclusive evidence about the programme's effectiveness.

The self-selected nature of the respondent group introduces potential response bias, as those who chose to participate may have held stronger opinions (either positive or negative) about the COTE programme than non-respondents. This selection bias further limits our ability to draw broad conclusions about facilitator perspectives as a whole. Additionally, the study relies solely on facilitator and e-tutor perspectives, without triangulating these views with direct participant feedback or objective performance measures. This single-source approach provides

a valuable but inherently limited perspective on programme outcomes. While facilitator observations offer important insights into visible changes in participant behavior and confidence, they cannot fully capture the internal learning experiences or transfer of knowledge to diverse teaching contexts. The timing of data collection may also influence the findings, as it captures facilitator perceptions at a specific moment rather than tracking changes longitudinally. Without follow-up assessments, we cannot determine whether observed improvements persist over time or how effectively participants integrate new skills into their teaching practice in various institutional settings.

Furthermore, the research design focuses primarily on perceived changes rather than measurable outcomes in teaching effectiveness or student learning. This limitation reflects the challenges inherent in evaluating professional development programmes but necessitates caution when making claims about COTE's impact on actual teaching quality or student experiences. Methodologically, the thematic analysis was conducted by a single researcher without inter-coder reliability checks, which may introduce interpretive bias. While the Change Path Model provided a useful analytical framework, alternative theoretical lenses might yield different insights from the same data.

Given these limitations, the findings should be interpreted as suggestive rather than conclusive, offering preliminary evidence of COTE's potential effectiveness while acknowledging the need for more robust, multi-method research designs in future evaluations. Any generalizations beyond the immediate context should be made with considerable caution, recognizing the exploratory nature of this investigation and its focus on a specific professional development programme within a particular institutional setting.

### **Conclusion and Recommendations**

The study evaluated how support staff – facilitators, e-tutors and technical personnel – viewed the impact the Certificate in Online Teaching for Educators (COTE), a 6-week online program by the Institute of Distance Education in Eswatini, had on the more than 350 educators to date who obtained the certificate after having successfully completed all course work in the time given (November 2023). Perspectives were gathered from course facilitators and e-tutors using an online questionnaire administered via Google Forms. Cawsey et al.'s 2016 Change Path Model was applied to evaluate COTE's role in driving transformation through stages of Awakening, Mobilisation, Acceleration, Institutionalisation.

The findings effectively demonstrate that COTE successfully facilitates all four stages of the Change Path Model, with particular strength in the Awakening and Mobilization phases. The recommendations highlight the need for greater attention to the Institutionalization phase to ensure sustainable change. These results expand on previous literature by showing how a structured, modular approach to online teaching professional development can systematically build both competence and confidence while navigating the stages of organizational change. The study provides valuable insights into effective design principles for professional development programs aimed at building online teaching capabilities, though the small sample size (6 out of 12 possible respondents) limits generalizability, as acknowledged in the study limitations section.

Findings showed the COTE programme improved skills in course design, materials creation, assessment, facilitation, and learner-centred approaches. Ongoing post-graduation support is critical to sustain gains made through COTE per the Change Model. In view of this, I propose the following recommendations:

1. Create a COTE learning community to provide continued professional development as online education advances.
2. Offer the COTE programme as a credit-bearing course integrated into teacher education curricula at UNESWA.
3. Conduct additional research on COTE graduates' experiences applying skills in classrooms.
4. Expand data triangulation by adding focus groups and interviews to the research methodology.
5. Compare COTE's efficacy to outcomes from other online teacher training programmes through comparative studies.

### Acknowledgement

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### Conflict of Interest

The author declares that there is no conflict of interests regarding the publication of the paper or otherwise.

### Authors' Contributions

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

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