






# An Analysis Of Teachers' Perspectives on the Use of Google Classroom to Enhance Assessment for Learning in Accounting

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## ABSTRACT

The introduction of educational technology has transformed the assessment practices of Accounting teachers. The advent of technology has created space for Accounting teachers to design meaningful Assessment *for* Learning (AfL) tasks using technology platforms such as Google Classroom. Google Classroom can be used to create meaningful learning environments that facilitate the development of the necessary 21st-century skills and competencies such as critical thinking, problem-solving, self-management and self-competence. However, nearly a decade after its introduction, Google Classroom is still minimally used in South African schools. This empirical study, therefore, explored the use of Google Classroom to enhance AfL in Accounting. The study used a qualitative research approach and Participatory Action Research as a research design to explore the use of Google Classroom as an AfL technique by Accounting teachers. As with other qualitative studies, focus group discussions were used to generate data from four purposefully selected Accounting teachers. Data was analysed using thematic analysis. The findings revealed that Accounting teachers perceived Google Classroom to be an assessment technique which leads to effective teaching and learning because it provides a platform for learner active participation. Furthermore, the teachers displayed an interest in Google Classroom as a tool to facilitate meaningful teaching and learning, which enabled them to support and strengthen the learning of Accounting. It is recommended that teachers constantly use this platform as it allows learners to be assessed outside the boundaries of a physical classroom.

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## INTRODUCTION

The introduction of educational technology and curriculum reforms in education has had an inevitable impact and transformation on assessment practices used in Accounting.<sup>1</sup> These changes have led to a paradigm shift in assessment practices, wherein assessment in Accounting shifted from being confined to the four corners of the classroom and limited to schooling hours to learners being assessed anywhere they are and at any time of the day.<sup>2</sup> Active participation by learners was also a central issue in this transformation as Accounting teachers had

<sup>1</sup> C. Woodall et al., "Reimagining the Role of Technology in Education: 2017 National Education Technology Plan Update" (US Department of Education, viewed, 2020).

<sup>2</sup> J. C. Ngwenya and O. O. Arek-Bawa, "Assessment in Textbooks: Exploring Cognitive Demand in First-Year Accounting Textbooks," *South African Journal of Higher Education* 34, no. 1 (2020): 176–96.

to reconsider their assessment practices to produce learners who were competent in using a wide range of technological tools.<sup>3</sup> With an extensive range of technological tools available, Google Classroom is one tool that Accounting teachers could use to encourage active participation and collaboration in the classroom by creating and distributing meaningful Assessment for Learning (AfL) tasks to learners anytime.<sup>4</sup>

AfL is a fundamental component that promotes effective teaching and learning in an Accounting classroom.<sup>5</sup> Its effectiveness depends on how well a teacher implements it. AfL is a continuous process of seeking and interpreting evidence for utilisation by teachers and learners.<sup>6</sup> When implementing AfL, teachers have to constantly ask these three questions; “Where are the learners in their learning?”, “Where do they need to go?” and “How best do they get there?” This implies that a teacher continuously shares the learning intentions, clarifies the success criteria, uses AfL tasks and activities to obtain evidence of learning and provides effective feedback to move learning forward.<sup>7</sup> However, AfL is considered complex and multi-faceted as it requires teachers to be thoroughly grounded in the technological, pedagogical and content knowledge in Accounting to implement it in the classroom effectively.<sup>8</sup>

Graham, van Staden and Dzamesi indicate that AfL is a practical intervention and is implemented in phases.<sup>9</sup> This suggests that through using technological tools such as Google Classroom, Accounting teachers design meaningful AfL tasks to engage learners with their learning, track the learning progress and bridge the learning gaps by using effective scaffolding approaches. Kumar, Bervell and Osman mention that Google Classroom presents Accounting teachers with flexibility and control in managing the learning content and allows them to present the learners with the required support to complete assessments using the learning platform.<sup>10</sup> Here, the teachers provide the learning material in Accounting, assign the AfL tasks to learners and upload the learners’ grades so that they can see the marks achieved in the subject and work on improving their learning. Thus, through Google Classroom, the implementation of AfL in an Accounting classroom is enhanced by providing effective feedback that is applied to strengthen learning, establish learning challenges and assist the learners in properly understanding the content.<sup>11</sup>

Despite the significance of AfL and the impact of technology in education, the literature indicates that Accounting teachers face challenges in utilising the innovative benefits that educational technology has brought to support learning.<sup>12</sup> These challenges include the inadequate knowledge and skills that teachers have in integrating technology into their teaching and in designing meaningful AfL tasks, providing effective feedback and moving learning forward.<sup>13</sup> Probably, these inadequacies could be attributed to the decline in the number of learners that enrol in Accounting and the poor academic performance in Accounting in the South African context. The poor academic performance in the South African context is evident from the Department of Basic Education (DBE) diagnostic report which indicates that less than 55% of the learners who sat for the National Senior Certificate achieved 40 % and above.<sup>14</sup> To the researchers’ knowledge, no research has been conducted on using Google Classroom to enhance AfL in secondary school Accounting in South Africa. Thus, this study

<sup>3</sup> Thabiso Jonah Motsoeneng, Henry James Nichols, and Sekitla Daniel Makhasane, “Challenges Faced by Rural Accounting Teachers in Implementing Web-Based Collaborative Learning,” *Perspectives in Education* 39, no. 3 (2021): 79–93.

<sup>4</sup> Arif Widiyatmoko, “The Effectiveness of Google Classroom as a Tool to Support Online Science Learning: A Literature Review,” in *Journal of Physics: Conference Series*, vol. 1918 (IOP Publishing, 2021), 052069.

<sup>5</sup> Motsoeneng, Nichols, and Makhasane, “Challenges Faced by Rural Accounting Teachers in Implementing Web-Based Collaborative Learning”; Laura Naka, “The Impression of Formative Assessment in the Immediate EFL Learning Improvement: Investigation of Pre-Service Teachers’ Perception in English for Teachers Course,” *International Journal of Language Testing* 13, no. 1 (2023): 236–59.

<sup>6</sup> J. A. De Vries et al., “The Impact on Student Achievement of an Assessment for Learning Teacher Professional Development Program,” *Studies in Educational Evaluation* 74 (2022): 101184.

<sup>7</sup> Ernesto Panadero and Anastasiya A Lipnevich, “A Review of Feedback Models and Typologies: Towards an Integrative Model of Feedback Elements,” *Educational Research Review* 35 (2022): 100416.

<sup>8</sup> Alastair Irons and Sam Elkington, *Enhancing Learning through Formative Assessment and Feedback* (Routledge, 2021).

<sup>9</sup> Irons and Elkington, *Enhancing Learning through Formative Assessment and Feedback*.

<sup>10</sup> Jeya Amantha Kumar, Brandford Bervell, and Sharifah Osman, “Google Classroom: Insights from Malaysian Higher Education Students’ and Instructors’ Experiences,” *Education and Information Technologies* 25 (2020): 4175–95.

<sup>11</sup> A Z Ilma, K Adhelacahya, and E Y Ekawati, “Assessment for Learning Model in Competency Assessment of 21st Century Student Assisted by Google Classroom,” in *Journal of Physics: Conference Series*, vol. 1805 (IOP Publishing, 2021), 012005.

<sup>12</sup> Muhammad Fuad et al., “Exploring Teachers’ TPACK: Are Indonesian Language Teachers Ready for Online Learning during the COVID-19 Outbreak?,” *Universal Journal of Educational Research* 8, no. 11B (2020): 6091–6102; Chris Hendriks and Grace F Dunn, “Factors That Influence Learners’ Performance in Grade 12 Accounting: A Case Study in the Northern Cape,” *Koers* 86, no. 1 (2021): 1–14.

<sup>13</sup> Wellington Manzi and Boitumelo Moreeng, “Mediating Economics Curriculum Implementation Through Meaningful Assessment—A Case Study of the South African Educational System,” *E-Journal of Humanities, Arts and Social Sciences* 4, no. 6 (June 14, 2023): 726–43, <https://doi.org/10.38159/ehass.2023463>.

<sup>14</sup> Department of Basic Education, *National Senior Certificate Examination Report* (Pretoria: Government Printers, 2019, 2020, 2021, 2022).

seeks to contribute to the body of knowledge by investigating the Accounting teachers' perspectives on using Google Classroom to enhance AfL in an Accounting classroom.

This paper addresses the question: What are the Accounting teachers' perspectives on using Google Classroom to enhance AfL in an Accounting classroom? The qualitative research approach was utilised as the research methodology for the paper, and Participatory Action Research was chosen as a research design. This paper starts by discussing the literature review, with a focus on curriculum implementation, Accounting as a subject, Assessment for Learning and the integration of Google Classroom within an Accounting class. It continues to discuss the research methodology that was used to generate the data for this study, findings and discussions, recommendations for future research and ends with a conclusion.

## LITERATURE REVIEW

There are a few studies in Accounting Education that have investigated the integration of educational technology in assessment to improve learner academic performance.<sup>15</sup> Anyanwu, Govender and Ngwenya studied the integration of technology in Business Education in Nigeria, and their findings exposed a poor investment in technology integration in schools which affected the pedagogical implementation.<sup>16</sup> Similarly, Skhepe and Matashu conducted a study on using technology in an Accounting classroom in South Africa.<sup>17</sup> Their findings specified that the teachers were willing to integrate technology in the classroom but were confronted with limitations such as the high cost of data and school policies that restricted the utilisation of cell phones on the school premises. Additionally to the above studies regarding the use of educational technology in Accounting, Ndlovu investigated the Accounting teachers' experiences of enacting Financial Literacy/Accounting in a technology-rich environment.<sup>18</sup> His study's findings exposed that the varying use of experiences reflected inadequate content and technological knowledge that affected the pedagogical knowledge and other curriculum requirements. Furthermore, Motsoeneng et al. conducted a study on Accounting teachers' understanding and use of AfL to enhance curriculum implementation. The findings of this study signified that teachers had a limited understanding of AfL which led to its underutilization. Nonetheless, as mentioned earlier, the use of educational technology and the effectiveness of AfL depend on the Accounting teachers' capabilities to interpret and implement the curriculum meaningfully.<sup>19</sup> The next sections discuss curriculum implementation, Accounting as a subject, Assessment for Learning and Google Classroom in the teaching and learning of Accounting.

### Curriculum Implementation

Curriculum is a significant element in the success of education within a nation because it is developed to provide guidance and equip people with the required knowledge, skills, values and attitudes that enable them to function in living their lives in school and communities.<sup>20</sup> It is the learning experiences and intended learning outcomes that are systematically planned by government authorities and implemented in schools through the reconstruction of knowledge of the cognition, psychomotor and affective development of learners.<sup>21</sup> The curriculum has three stages. These are the intended, implemented and attained.<sup>22</sup> This research paper focuses on curriculum implementation in Accounting. Curriculum implementation is described as the teacher delivering a lesson and administering AfL tasks using their interpretation of the prescribed syllabi into practice.<sup>23</sup> In

<sup>15</sup> Stephan J Kruger, "Improving Student Assessment Feedback in an Introductory Accounting Course through Two-Stage Collaborative Assessment," *South African Journal of Higher Education* 33, no. 6 (2019): 172–90; Elka Johansson et al., "Formative Assessment in Accounting: Student Perceptions and Implications of Continuous Assessment," *Accounting Education*, 2022, 1–29.

<sup>16</sup> Clinton Chidiebere Anyanwu, Desmond Wesley Govender, and Jabulisile Cynthia Ngwenya, "Integration of Technology in Business Education: Emerging Voices from Secondary School Classrooms in Nigeria," *E-Journal of Humanities, Arts and Social Sciences* 3, no. 5 (May 4, 2022): 160–74, <https://doi.org/10.38159/ehass.2022351>.

<sup>17</sup> Melikhaya Skhepe and Martha Matashu, "The Use of Technology in Accounting Classrooms During COVID-19: What Do Accounting Teachers in the Eastern Cape, South Africa, Have to Say?," *Research in Social Sciences and Technology* 6, no. 2 (2021): 267–78.

<sup>18</sup> Vusumuzi Prince Ndlovu, "Secondary Teachers' Experiences of Enacting Financial Literacy/Accounting in a Technology-Rich Environment," *African Identities*, 2022, 1–17.

<sup>19</sup> Thabiso Jonah Motsoeneng and Boitumelo Moreeng, "Accounting Teachers' Understanding and Use of Assessment for Learning to Enhance Curriculum Implementation," *Journal of Studies in Social Sciences and Humanities* 8, no. 3 (2022): 288–302.

<sup>20</sup> Hidayah, Ratna, Muhammad Nur Wangid, and Wuri Wuryandani. "Elementary School Teacher Perception of Curriculum Changes in Indonesia." *Pegem Journal of Education and Instruction* 12, no. 2 (2022): 77–88.

<sup>21</sup> Batchman Ekure Isaac, Nathaniel Nnamdie Usoro, and Udoh Abasido Akpan, "Technical Teachers Role in the Effective Implementation of Technical College Curriculum," *Intercontinental Journal of Education, Science and Technology* 4, no. 1 (2019): 53–60.

<sup>22</sup> Antoine Van Den Beemt, Marieke Thurlings, and Myrthe Willems, "Towards an Understanding of Social Media Use in the Classroom: A Literature Review," *Technology, Pedagogy and Education* 29, no. 1 (2020): 35–55.

<sup>23</sup> E. A. Nevenglosky, C. Cale, and S. P. Aguilar, "Barriers to Effective Curriculum Implementation," *Research in Higher Education Journal* 36 (2019).

agreement, Isaac et al. explain curriculum implementation as the interaction of the learner and the contents of the curriculum with the guidance of the teacher to attain the necessary knowledge, skills, values and attitudes.<sup>24</sup> Central to this description of the curriculum implementation is the teacher's act of interpreting and translating the curriculum into action in an Accounting classroom and allowing the learners to develop their cognitive, affective and psychomotor skills and knowledge. Thus, the effectiveness of implementing the curriculum depends on the teachers' capabilities to interpret and implement the curriculum using policy documents, assessment guidelines and relevant documents.

### **Accounting as a Subject**

In the South African context, Accounting is offered as an elective subject in the Further Education and Training Phase (Grades 10 – 12). Accounting focuses on measuring performance, processing and communicating financial information about economic sectors.<sup>25</sup> With the introduction of the CAPS, Accounting moved away from just the transmission of facts and procedures to learners understanding the theoretical concepts by working through financial problems to reach a point of proficiency.<sup>26</sup> This is tailor-made to ensure the realisation of the aims of CAPS which amongst others are to ensure that learners acquire and apply the skills, knowledge and values in a meaningful way in their lives.<sup>27</sup> More so, learners are expected to demonstrate their understanding of the acquired knowledge and skills in the real world by realising that the contexts of learning and solving problems do not exist in seclusion.<sup>28</sup> Thus, to ensure an effective curriculum implementation in an Accounting classroom, teachers must interpret and implement the curriculum policy adequately to develop the learners' cognitive, affective and psychomotor knowledge.

### **Assessment for Learning**

Research indicates that for effective learning and assessment to occur, teachers ought to engage learners adequately and apply the required pedagogical practices to establish what the learners have learned and be able to identify and address the learning gaps.<sup>29</sup> A pedagogical strategy that may be utilised to improve learning in this regard is AfL. Black and Wiliam explain AfL as evidence about learners' achievement that is elicited, interpreted and used by teachers, learners and/or peers to decide on the subsequent steps in teaching and assessment that are likely to be taken than the decisions that would have been made in the absence of the evidence that was elicited.<sup>30</sup> AfL focuses on monitoring the quality of teaching, learning and assessment implemented in the classroom, wherein continuous feedback is provided to improve and guide teaching and learning.<sup>31</sup> It is a practical strategy that is utilised constantly in the classroom to interpret and translate evidence for use by the learners and teachers to decide "where the learners are in their learning", "where they need to go", and "how best to get there".<sup>32</sup> To address these, teachers should share the learning intentions, clarify success criteria, elicit evidence of learning using AfL tasks and provide feedback that improves learning.

### **Google Classroom**

With the introduction of technology in education, tools such as Google Classroom have created space for Accounting teachers to develop meaningful AfL tasks and activities to permit learners to have the freedom to

<sup>24</sup> Isaac, Usoro, and Akpan, "Technical Teachers Role in the Effective Implementation of Technical College Curriculum."

<sup>25</sup> Department of Basic Education, *Curriculum and Assessment Policy Statement: Grades 10-12* (Pretoria: Government Printers, 2011).

<sup>26</sup> O. Arek-Bawa, "Cognitive Demand of Assessment Activities in Level-One Financial Accounting Textbooks in Selected African Countries" (University of KwaZulu-Natal, 2018); Billy Tak-Ming Wong et al., "Evolution and Effectiveness of E-Learning in Accounting Education: The Case of Hong Kong," *International Journal of Innovation and Learning* 25, no. 2 (2019): 185–96.

<sup>27</sup> Department of Basic Education, *Curriculum and Assessment Policy Statement: Grades 10-12*.

<sup>28</sup> Jabulisile C Ngwenya and Siyacela Nzuza, "Teachers' Views on the Role of Economic and Management Sciences in Preparing Learners for Accounting in the Further Education and Training Phase," *South African Journal of Education* 42, no. 4 (2022).

<sup>29</sup> Hayley Franklin and Ingrid Harrington, "A Review into Effective Classroom Management and Strategies for Student Engagement: Teacher and Student Roles in Today's Classrooms," *Journal of Education and Training Studies*, 2019; Jeanette K Ramollo and Anil Kanjee, "Supporting Teachers to Develop Formative Assessment Knowledge and Skills in No-Fee Schools," *South African Journal of Childhood Education* 13, no. 1 (2023): 1247.

<sup>30</sup> Paul Black and Dylan Wiliam, "Developing the Theory of Formative Assessment," *Educational Assessment, Evaluation and Accountability (Formerly: Journal of Personnel Evaluation in Education)* 21 (2009): 5–31.

<sup>31</sup> Hanna B Westbroek et al., "A Practical Approach to Assessment for Learning and Differentiated Instruction," *International Journal of Science Education* 42, no. 6 (2020): 955–76.

<sup>32</sup> Assessment Reform Group, *Assessment for Learning: 10 Principles* (London: Assessment Reform Group, 2002); Björn Tolgfors, "Different Versions of Assessment for Learning in the Subject of Physical Education," *Physical Education and Sport Pedagogy* 23, no. 3 (2018): 311–27.

learn.<sup>33</sup> Google Classroom is a learning platform that is used in schools to simplify creating giving and taking of assignments, virtual grading of learners and providing immediate feedback to move learning forward.<sup>34</sup> This platform allows teachers to include links, videos and files which learners can use either as part of the assignments or as resources.<sup>35</sup> It offers numerous facilities which make it easier for teachers to administer AfL tasks and activities as the planned learning is not restricted to the physical classroom, but learning occurs anywhere and every time by learners accessing the online platform.<sup>36</sup> Teachers find it easy to manage their workload since they can check learners' assignments online. Another benefit of Google Classroom is that it fosters an environment of creativity and collaboration among learners and their teachers.<sup>37</sup> However, it should be highlighted that technologies like Google Classroom do not come without criticism. Hill and Fang, Yantong and Luo jointly bemoan that lower grades, attention deficit and social interaction problems have been associated with the use of technology at an early age.<sup>38</sup> Notwithstanding the negative effects of technology, it is overwhelmingly evident that integrating technology enhances the teaching and learning process. Thus, for effective curriculum implementation, it is necessary that technological resources that support teaching and learning are available and that teachers are trained adequately to implement strategies such as AfL using educational technology in the classroom.

## METHODOLOGY

This study was located in the transformative paradigm as it centred around the experiences of Accounting teachers which included their unique challenges in the teaching environment and the research findings were linked to action to reduce the gaps.<sup>39</sup> Qualitative research was used as a methodology to focus and engage the Accounting teachers on their perspectives on using Google Classroom to enhance AfL in the teaching and learning environment.<sup>40</sup> Participatory Action Research was used as a research design to collaborate with the Accounting teachers to seek a positive change in the teaching environment by generating knowledge and skills by using Google Classroom together with AfL to improve academic performance.<sup>41</sup> To generate data, the researchers used the Participatory Action Research three-stage approach, which included planning and preparation, implementation and evaluation.<sup>42</sup> Focus group sessions and workshops were used to generate data as part of the planning and preparation, and implementation stages.

Four participants situated in the Free State province were selected using purposeful sampling. The participants had a professional teaching qualification specialising in Accounting and had taught the subject in their respective schools for the past five years. In compliance with the ethical consideration, permission was sought from the Free State Department of Education and the University of the Free State (**Ethical clearance number: UFS-HSD2021/0992/21**). The participants signed consent forms to provide consent, and this was a voluntary process. As such, the participants were informed that they could withdraw from the study at any time should they wish to do so. The discussions were centred around the following: *What are the Accounting teachers' perspectives on using Google Classroom to enhance AfL in an Accounting classroom?*

Thematic analysis was used to analyse the qualitative data, wherein it was described, analysed and interpreted.<sup>43</sup> To ensure the truthfulness and certification of the data generated, a member check was completed before describing the narrations.<sup>44</sup>

<sup>33</sup> Asifa Dhearul Janah, Desi Wijayanti Ma'rufah, and Maulana Mualim, "The Use of Interactive Formative Assessment in An Efl Class Through The Comment Column of Google Classroom," *Tarling: Journal of Language Education* 6, no. 1 (2022): 21–48.

<sup>34</sup> Sukmawati Sukmawati and Nensia Nensia, "The Role of Google Classroom in ELT," *International Journal for Educational and Vocational Studies* 1, no. 2 (2019): 142–45.

<sup>35</sup> Google for Education, *G Suite for Education* (Mountain View, CA: Google, 2020).

<sup>36</sup> E. R. Koppel, "The Googlification of Our Classrooms," Medium, December 2, 2019, <https://medium.com/@elirkoppel/the-googlification-of-our-classrooms-3b263fdd62d4>.

<sup>37</sup> S. Mohammed, "Is Technology Good or Bad for Learning?," Brown Center Chalkboard., May 8, 2019, <https://www.brookings.edu/blog/brown-center-chalkboard/2019/05/08/is-technology-good-or-bad-for-learning/>.

<sup>38</sup> D L Hill, "Why to Avoid TV for Infants & Toddlers," in *American Academy Of*, 2016; Yantong Fang, Dai Han, and Hong Luo, "A Virtual Reality Application for Assessment for Attention Deficit Hyperactivity Disorder in School-Aged Children," *Neuropsychiatric Disease and Treatment*, 2019, 1517–23.

<sup>39</sup> Karen Moran Jackson et al., "Using the Transformative Paradigm to Conduct a Mixed Methods Needs Assessment of a Marginalized Community: Methodological Lessons and Implications," *Evaluation and Program Planning* 66 (2018): 111–19.

<sup>40</sup> Patrik Aspers and Ugo Corte, "What Is Qualitative in Qualitative Research," *Qualitative Sociology* 42 (2019): 139–60.

<sup>41</sup> Pete Wright, "Transforming Mathematics Classroom Practice through Participatory Action Research," *Journal of Mathematics Teacher Education* 24, no. 2 (2021): 155–77.

<sup>42</sup> Marzieh Mohammadi et al., "Launching Continuous Kangaroo Mother Care through Participatory Action Research in Iran," *BMC Health Services Research* 23, no. 1 (2023): 1–8.

<sup>43</sup> Virginia Braun and Victoria Clarke, "Reflecting on Reflexive Thematic Analysis," *Qualitative Research in Sport, Exercise and Health* 11, no. 4 (August 8, 2019): 589–97, <https://doi.org/10.1080/2159676X.2019.1628806>.

<sup>44</sup> Amber G Candela, "Exploring the Function of Member Checking," *The Qualitative Report* 24, no. 3 (2019): 619–28.

## FINDINGS AND DISCUSSION

To respond to the research question, the themes discussed below were detected after transcribing data from the focus group sessions and workshops.

**Table 1: General overview of findings of the research question**

Research question	PAR Phase	Themes
What are the Accounting teachers' perspectives on using Google Classroom to enhance AfL in an Accounting classroom?	Planning and preparation	Using Google Classroom to enhance AfL in Accounting.
	Implementation & Evaluation	<p>Captivates and maintains learner engagement.</p> <p>Enables interactive and collaborative learning.</p> <p>Enables easy dissemination, submission and grading of assignments.</p> <p>Provides teachers and learners with immediate and meaningful feedback</p>

### *Planning and Preparation Phase*

The planning and preparation phase was arranged to address the challenges that the Accounting teachers identified in using Google Classroom. Data which was prepared to equip the participants with the knowledge and skill of meaningfully using Google Classroom to improve AfL in Accounting was generated through training.

### *Using Google Classroom to Enhance AfL in Accounting*

During the workshop, the participants were equipped and trained with the knowledge and skills to utilise Google Classroom in an Accounting class. This process was integrated with the practical application of AfL, which included practical activities on sharing learning intentions, clarifying success criteria, eliciting evidence of learning using AfL and providing effective feedback.

A closer look at Figure 1 gives evidence of the discussions, activities and engagements that occurred in the workshop to assist the teachers in understanding and effectively using Google Classroom. Here, the participants were in a space and environment to engage in critical conversations to raise challenges that affect them in using educational technology in the classroom and suggest meaningful solutions to the identified challenges to improve AfL in the classroom.



*Figure 1: Workshop on Google Classroom*

### **Implementation and Evaluation phase**

Qualitative data was analysed using thematic analysis.<sup>45</sup> Drawing on existing interview data, the following themes on the teachers' perspectives on the use of Google Classroom to enhance AfL in an Accounting classroom emerged:

#### ***Captivates and Maintains Learner Engagement***

Google Classroom allows the teacher to differentiate the learning material and assessments based on learners' abilities.<sup>46</sup> Through the accommodation of different learner abilities, no learner is left behind and therefore every learner is motivated to learn.<sup>47</sup> Also, given that most 21<sup>st</sup>-century learners are biased toward technology, the use of Google Classroom makes learning fun, pleasurable and full of memorable events.<sup>48</sup>

*I am able to select my targeted learners and send those targeted learners the assignment or task. This allows me to differentiate the level of difficulty of the assessments based on my learners' abilities (PA)*

Participant A's assertion that Google Classroom is a platform that can be used for differentiated assessment is not unique to this study. Literature such as that of Rasulov et al. echo the same sentiments that Google Classroom allows learners of different abilities to be exposed to different activities based on their abilities.<sup>49</sup>

*With Google Classroom, learning is fun to my learners given their bias towards technology and therefore means that they are not bored with assessments as they learn using their preferred gadgets (PC)*

*The facilitation of differentiated assessment provided by this App helps me to focus on individual learners with different abilities and challenges whilst receiving their attention given that 21<sup>st</sup>-century learners are biased towards technology(PB)*

From the interview data, it becomes apparent that the participants believe that Google Classroom enables learners' attention to be captured and maintained in the teaching and learning process. Learners' biases towards technology are exploited for the benefit of enhanced Accounting curriculum implementation. This finding is in unison with previous studies of Kaplan-Rakowski et al. and Sharpe et al. which postulate that Google Classroom has the power to draw and keep learners attention for a reasonable period in the teaching and learning process.<sup>50</sup>

#### ***Enables Interactive and Collaborative Learning***

Available literature posits that the use of technology such as Google Classroom provides learners with an opportunity to interact and collaborate with their peers and teachers even outside the physical classroom.<sup>51</sup> There is no time limit on the interaction between learners themselves and the learners with their teachers. Through this flexible interaction platform, teacher-learner interaction is enhanced and learners can develop skills such as collaboration, problem-solving and critical thinking.<sup>52</sup> Participants in this study echoed similar sentiments as they said

*It facilitates interaction, collaboration and discussion amongst my learners (PB)*

*The announcement feature makes it easier for me to exchange messages with my class (PC)*

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<sup>45</sup> Braun and Clarke, "Reflecting on Reflexive Thematic Analysis."

<sup>46</sup> I. M. Rasulov, D. X. Makhkamova, and D. M. Gofforova, "Possibilities, Advantages And Disadvantages Of Using The Google Classroom Platform In The Educational Process," *Conferencea*, 2023, 199–202.

<sup>47</sup> Stephen Sharpe and Gabrielle Young, "Using Google Classroom as Assistive Technology in Universally Designed Classrooms," *Canadian Journal of Learning and Technology* 49, no. 1 (2023): 1–17.

<sup>48</sup> Regina Kaplan-Rakowski and Tomasz Wojdyski, "Students' Attitudes toward High-Immersion Virtual Reality Assisted Language Learning," *Future-Proof CALL: Language Learning as Exploration and Encounters—Short Papers from EUROCALL*, 2018, 124–29.

<sup>49</sup> Rasulov, Makhkamova, and Gofforova, "Possibilities, Advantages And Disadvantages Of Using The Google Classroom Platform In The Educational Process."

<sup>50</sup> Kaplan-Rakowski and Wojdyski, "Students' Attitudes toward High-Immersion Virtual Reality Assisted Language Learning"; Sharpe and Young, "Using Google Classroom as Assistive Technology in Universally Designed Classrooms."

<sup>51</sup> Eric Krokos, Catherine Plaisant, and Amitabh Varshney, "Virtual Memory Palaces: Immersion Aids Recall," *Virtual Reality* 23 (2019): 1–15.

<sup>52</sup> Kaukab Abid Azhar and Nayab Iqbal, "Effectiveness of Google Classroom: Teachers' Perceptions," *Prizren Social Science Journal* 2, no. 2 (2018): 52; Brandy A Martin, "Teachers Perceptions of Google Classroom: Revealing Urgency for Teacher Professional Learning," *Canadian Journal of Learning and Technology* 47, no. 1 (2021).



*My learners can share information on this platform and can work together on group assignments(PA)*

The participants in this study seemed to share similar sentiments on how Google Classroom facilitated class interactions and discussions. Just as Azhar et al. suggest, the findings of this study reinforce the narrative of Google Classroom facilitating active and collaborative learning.<sup>53</sup> This is backed by Participant A's assertion that *My learners can share information on this platform and can work together on group assignments*.

### ***Enables Easy Dissemination, Submission and Grading Of Assignments***

Through Google Classroom, teachers can create assignments, give quizzes and manage assignments.<sup>54</sup> It makes the assessment easy as learners can submit their assessments online and the teacher can mark the assessment online. This assertion is backed by literature from other scholars such as Rasulov et al. who have asserted that through Google Classroom, teachers can "quickly review assignments, assign grades and add comments."<sup>55</sup> From the interviews, it emerged strongly that teachers took advantage of Google Classroom to upload, announce and assess assignments.

*This platform allows me to post assignments so that my learners can access them at any time and anywhere they are. (PC)*

*Learners do not have to meet me physically for them to submit their assignments. It is also good because once a learner submits their work, I get a notification to that effect. (PA)*

*I don't have to make hard copies of the assignments which might be a problem due to issues like a shortage of printing paper, and load shedding. (PA)*

He added:

*Again, I am safeguarded as no learner might come and complain that I misplaced their assignment as I mark online.*

It becomes apparent that teachers viewed Google Classroom as an enabling tool to administer and grade learners' work. It also facilitated easy submission of assignments and other forms of assessments on the part of the learners. This finding corroborates Martin and Rasulov et al.'s position that this platform makes assessment dissemination, submission and assessment easy.

### ***Provides Teachers and Learners with Immediate and Meaningful Feedback***

One of the advantages of Google Classroom documented in available literature is its facilitation of prompt feedback to the learners.<sup>56</sup> Through the provision of immediate feedback, teachers, where necessary, are able to adjust their teaching strategies and approaches so that they can assist learners in areas where they have challenges.<sup>68</sup> On the part of the learner, Google Classroom allows the learner to get immediate feedback and see where they need to improve or where they are excelling.<sup>57</sup>

Participants C and A had the following to say:

*One thing I like about this platform is that I can upload the answers and once learners have submitted their work, it is automatically marked and they get feedback immediately. (PC)*

*I don't have to spend hours marking every time and delay giving my learners feedback as some assignments are marked automatically. All I have to do is analyze where my learners have challenges and decide on intervention strategies. (PA).*

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<sup>53</sup> Azhar and Iqbal, "Effectiveness of Google Classroom: Teachers' Perceptions."

<sup>54</sup> Martin, "Teachers Perceptions of Google Classroom: Revealing Urgency for Teacher Professional Learning."

<sup>55</sup> Rasulov, Makhkamova, and Gofforova, "Possibilities, Advantages And Disadvantages Of Using The Google Classroom Platform In The Educational Process."

<sup>56</sup> Randy Joy Magno Ventayen et al., "Usability Evaluation of Google Classroom: Basis for the Adaptation of Gsuite e-Learning Platform," *Asia Pacific Journal of Education, Arts and Sciences* 5, no. 1 (2018): 47–51.

<sup>57</sup> Paul Davidson and Y T Chong, "MS Classroom, Google Classroom & Allied Apps: Comparison from an Educational Perspective," 2017.



Participants C and A's postulations indicate how Google Classroom made their assessment practices easy. They indicated how prompt feedback was provided to the learners through this platform. Participant A went further to assert that this platform allowed him to focus more on identifying areas of the curriculum where learners were struggling and designing intervention strategies. These assertions by the participants are not new, earlier studies share the same views on how Google Classroom made assessment practices easy and effective.<sup>58</sup>

Applauding Google Classroom for facilitating prompt feedback and how this prompt feedback assisted teachers in enhancing their Accounting curriculum implementation practices, Participant B stated:

*I get to spend more time assisting learners whilst the assignment questions are still fresh in their minds. This helps them to identify their mistakes. Thanks to Google Classroom for the prompt grading it provides on assessments. (PB)*

Participant B's postulation suggests that Google Classroom does not only enable teachers to provide prompt feedback to the learners but also helps them to assist learners on the grey areas whilst the challenges they experienced in the assessment are still fresh in their minds. The advantage of Google Classroom in providing prompt feedback is not peculiar to this study. The same views are contained in previous studies.

## RECOMMENDATIONS

From the findings and discussion of the research study, it is recommended that Accounting teachers constantly use Google Classroom in the teaching and learning environment as it permits an effective implementation of AfL and develops learner competencies such as critical thinking and problem-solving. Teaching, learning and assessment are not restricted to the physical boundaries of the school, as teachers are allowed to collaborate with stakeholders such as parents, guardians and the community to close the learning gaps identified in the process of teaching and learning. Essentially, there is an urgent need for DBE to organise capacity-building workshops to equip teachers with the knowledge and skills to integrate educational technology in the classroom. Afterwards, creating functional professional learning communities to sustain the consistent integration of educational technology in teaching, learning and assessment within an Accounting classroom.

## CONCLUSION

The study investigated the teachers' perspectives on the use of Google Classroom to enhance AfL in Accounting. It was revealed that Accounting teachers viewed Google Classroom as an enabling tool to administer meaningful AfL tasks, grade the work of learners and provide effective feedback that moves learning forward. However, AfL was indicated to be complex as it required a thorough grounding in technological, pedagogical and content knowledge in Accounting to be implemented effectively. The recommendations of the study indicated an urgent need for professional development by the DBE to equip Accounting teachers with the required skills and knowledge for integrating educational technology and subsequent building of functional professional learning communities to sustain capacity building. The study concludes that Accounting teachers must be supported and equipped with the necessary capabilities to effectively use educational technology such as Google Classroom to improve AfL in an Accounting classroom.

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