## RESEARCH ARTICLE

# An autoethnographic study: Self-growth approach for teacher educators in training tech-effective teachers

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#### **Abstract**

I hold the view that teachers have a significant impact on students' academic performance, and in the current digital educational environment, this impact has become much more significant. Although the technology available to teachers remained largely unchanged since before the pandemic, their struggles with online teaching highlighted the shortcomings of their technology training in teacher education programs. The lack of technological proficiencies among teachers frequently stems from insufficient training in digital skills within teacher education programs, which is often due to the teacher educators' own deficiencies in digital proficiency. Therefore, I contend that teachers' development in technology use should start with teacher educators. In this qualitative autoethnographic study, I, as a teacher educator, critically examine how I improve my digital literacy and technological pedagogical skills, utilizing a collection of data sources including reflective accounts, lecture notes, teaching diaries, and student feedback. By sharing this journey, I aim to offer insights that other teacher educators may perceive as beneficial for their own professional development. I argue that adopting a non-formal self-growth approach is a useful way for teacher educators to equip future teachers with the required knowledge and skills for effective technology integration in their future practices. © 2023 The Literacy Trek & the Authors – Published by The Literacy Trek

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### Keywords

autoethnography, teacher, teacher education, teacher educators, technology, self-growth approach

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# Introduction

Behind every great teacher, there is a great teacher educator.

Teacher education must adapt to provide practice-oriented guidance and equip teachers to integrate modern technology in varied teaching settings. This is necessary to meet the ongoing need for high-quality instructors. During the Covid-19 pandemic, many teachers had to quickly switch to online teaching. In this online teaching environment, some teachers chose only lecturing or slide presentations because they were uncomfortable with technology while some other teachers ignored other ways of teaching. It was a reflection of their basic level of technology integration into their previous classroom practices. The challenge originates from the preparation that prospective teachers undergo, pointing to the role of teacher educators. This means that teachers should be trained by educators who are well-versed in how technology can be integrated in a meaningful way into instruction.

As a teacher educator, I have realized that my effectiveness greatly impacts the training quality of new teachers and their being tech-effective teachers. Goodwin and Kosnik (2013) emphasized this, but a challenge I face, as noted by Cochran-Smith et al. (2020), is the lack of support for my professional growth. This gap hinders my improvement as a teacher educator. Van der Klink et al. (2017) argue that our development is crucial for long-term success. However, Czerniawski et al. (2018) highlight a lack of clarity on how to facilitate this. In areas like educational technology, which Tondeur et al. (2020) stress, our expertise is especially critical in shaping the changing educational environment. Considering all these challenges, I can not help but ask myself: What is the best way for us as teacher educators to keep up with educational technology?

I know that my use of technology not only influences future teachers' attitudes and practices but also establishes the standard for how they integrate technology into their classroom instruction. Pre-service teacher education programs, for example, have been shown to alter pre-service teachers' attitudes about and experience with technology (Chen, 2010; Limboro & Kaugi, 2020). However, because their major responsibility is to train new teachers, many of these programs are dependent on how competent the teacher educators are. Studies such as those conducted by Başal (2015), Haydn (2014), and Nelson (2017) support the idea that teacher educators' use of technology has a substantial influence on how successfully teachers employ it in their future practices.

According to Fisher (2009), an issue is the absence of a sufficient number of professional teacher educators. This constraint is critical because, as Ball (1990) and Fisher (2009) noted, teacher candidates frequently imitate the teaching approaches they were exposed to throughout their training. As a result, teacher educators have a substantial impact on the abilities and knowledge of prospective teachers (Liston et al., 2008; Tondeur et al., 2019). If pre-service teachers use technology in their teacher education programs, they will feel more at ease using it in their own teaching practices

(Chapelle, 2003; Erben, 1999; Hernandez-Ramos, 2005; Mayo et al., 2005). Reflecting on these insights, I firmly believe that empowering teacher educators with adequate resources and training is crucial. The question is how can we, as educators, better equip ourselves to be the role models for the next generation of teachers, especially in integrating technology effectively? I will try to answer this question from my perspective in this research after touching on a few more key points.

The attitudes and skills of teacher candidates about using technology in their future practices have been influenced by their learning of technological knowledge through their teacher education programs (Voogt & McKenney, 2017). The limited focus on technology instruction in teacher education programs complicates the success of integrating technology into teaching, a concern raised by numerous researchers (Angeli & Valanides, 2005; Dudeney & Hockly, 2007; Gudmundsdottir & Hatlevik, 2018; Hubbard, 2008; Kay, 2006; Koehler & Mishra, 2009). This is a concerning tendency since Kirschner and Selinger (2003) and Hall et al. (2006) observe a constant lack of proper guidance on using technology in teacher education. Even though the references I used might seem a bit dated, the problem they highlight is still very much present. In a current research study, Nelson et al. (2019) reveal that many programs still fall short of providing teachers with the necessary training for integrating digital technology in the classroom. As noted by Hubbard (2008) and Garrett (2009), closing this gap requires overcoming a shortage of experienced, qualified educators as well as a lack of emphasis on instructional technology throughout their own education. Limboro and Kaugi (2020) highlight deeper structural issues in teacher education by addressing teacher educators' lack of technological training. Again, this brings us back to the question: How can we, teacher educators, best improve our technological knowledge and skills to guide future teachers effectively?

According to Polly et al. (2010), providing stand-alone courses on using different technologies is insufficient to prepare aspiring teachers to incorporate technology into their future practices. Rather, as stated by Limboro and Kaugi (2020), all teacher education programs have to showcase the integration of technology within their curricula. In other words, teaching digital skills alone is not the only aspect of teacher preparation for successful technology integration (Valverde-Berrocoso et al.,

2021). Teacher candidates need to witness and experience the application of these skills to their teaching practices. For teacher candidates, to utilize technology with confidence, proper instruction is essential (Başal, 2016; Hare et al., 2002). It is not enough to have technology available; it needs to be integrated smoothly into the teaching process. Therefore, teacher educators should model effective strategies for implementing technology in teaching for their students. For this reason, teacher educators should provide an example for their pupils on how to use technology in the classroom. Hayler (2011) notes that although a significant body of literature has been produced on teacher education and training, "the voices of teacher educators themselves have until recently been largely absent from this literature" (p. 2). I believe this is still true today, and it is something we really need to pay attention to.

I am convinced that courses and systematic models play a crucial role in the development of teacher educators. These structured educational frameworks may provide a foundation for imparting essential teaching skills and methodologies. By engaging in these well-organized programs, teacher educators can gain the knowledge and experience necessary to effectively train future teachers. However, teacher educators typically favor self-guided learning and research for their professional growth, often considering it a personal endeavor rather than engaging in structured training programs or organized courses (Herro et al., 2021). Bridging this general trend with my personal journey, this study explores my own experiences as a teacher educator. In this study, by focusing on my experiences as a teacher educator, I exemplify how I have attempted to develop myself as a teacher educator who integrates technology into my teacher education courses by adopting a five-phase self-growth approach. With this in mind, this autoethnographic study aims to portray my technology learning trajectory as a teacher educator.

### Method

This qualitative study adopted the autoethnography approach "in which a researcher recounts a story of his or her own personal experience" (Lapadat, 2017, p. 589). Autoethnography is a "reflexive self-observation" (Bochner & Ellis, 2016, p. 48) that can be used in teacher education to gain a deeper understanding of the teacher educators'

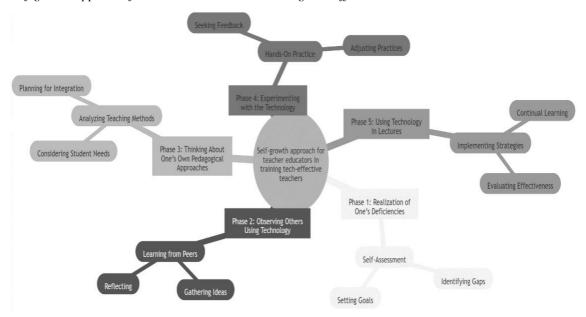
profession by employing a self-reflection on their own experiences (Hayler, 2011). This "self-study [approach] may yield valuable analytic insights" (Anderson, 2006, p. 446). Such an autoethnographic self-study approach enables teacher educators to learn more about their teaching perspectives and teaching practices and the relationship between teaching and learning through self-reflection and analysis of their identity as teacher educators (Loughran, 2014). Based on the value of autoethnographic self-study, the following central question guided my study: How did I develop myself as a teacher educator in integrating technology into my teacher education courses? In this, I try to explore and understand my personal development as both a teacher and a teacher trainer, specifically in relation to integrating technology into teaching practices. I believe that my journey and the various phases of my development could provide a roadmap for other teacher trainers navigating similar territory. In essence, this is an introspective examination of my professional growth in technology integration, with the dual purpose of enhancing personal practice and contributing to the collective knowledge of teacher training.

The data (reflection on over my twenty years of experience, my lecture notes, my teaching diaries, and written student feedback) for the current autoethnography study consisted of a detailed autobiographical account of my work as a teacher and teacher trainer. This study follows my personal journey in both of these roles. My expertise spans a variety of subjects including educational technology, instructional design, introduction to education, curriculum development, academic writing, and project development in education. This blend of practical teaching experience and teacher education allows me to offer a comprehensive and informed perspective on the development of future teachers, particularly in their effective integration of technology into teaching practices. In my teaching, I have used numerous technologies and digital tools including LMSs, online learning platforms, smart boards, digital tools, video tools, and more, to create a collaborative, cooperative, motivating, and engaging learning environment for the teacher candidates. By focusing my critical lenses on my prior experiences in teaching, I attempted to examine my own views regarding becoming a tech-effective teacher educator. My self-study based on my experiences as a teacher educator "might be both meaningful and applicable in the practice of others in the teacher education professional community" (Loughran, 2005, p. 13).

### **Results**

By focusing on my experience as a teacher educator, I devised a self-growth approach which includes five (5) phases (See Figure 1; For a concise explanation of the phases, please refer to Appendix A). This approach answers the question of how I developed myself as a teacher educator in integrating technology into my teacher education courses. I described the phases of my self-growth approach below. The phases listed here are the progressive uptake of technology in education by me as a teacher educator, and the phases I believe show this development. However, these phases should not be considered as a consecutive process, but rather be seen as more complex and interrelated with some phases overlapping at some point.

Figure 1
Self-growth approach for teacher educators in training tech-effective teachers



Phase 1: Realisation of one's deficiencies

(In this phase, educators critically evaluate their current technological skills, pinpoint areas of deficiency, and set clear objectives for improvement)

As a teacher educator, it is important to get comfortable with technology. It starts with just getting to know different digital tools out there and how to use them. The first thing I had to acknowledge was that, despite the fact that it occasionally seemed like an intrusion on my traditional teaching methods, technology was becoming more and more

common in classrooms. Thus, I started by acknowledging that I could not avoid technology and that I would not be able to adequately prepare my trainees for the educational contexts they would be working in if I did not develop into a tech-effective teacher educator. So, I began my own education by learning about technologies that are widely available on the Internet. In particular, I watched how-to videos on YouTube to learn about the functions of these technologies. I engaged in learning about various educational technologies, their functionalities, and potential applications. Here, I became acquainted with the fundamental abilities required to operate these technologies efficiently. It became easier for me to master more technical and digital tools once I became familiar with a few of them.

## Phase 2: Observing others using technology

(Educators learn by observing their experienced peers, collecting effective strategies and tools, and reflecting on how to adapt these practices to their own teaching style and subject matter).

Observing how others successfully integrate technology into their lectures provides valuable insights for one's own teaching practices. The second phase of my self-growth involved observing others who were currently integrating these technologies into their lectures. I requested permission to watch several of my colleagues' lectures whom I knew were utilizing technology, and I made notes about the technologies they were using, as well as how, when, and why they were using them. Again, I turned to viewing YouTube videos of various educators and teachers using these tools in the classroom. I also searched for case studies of effective technology integration by reading journal papers, internet discussion boards, and blogs on educational technology. Additionally, I subscribed to educational technology publications, attended webinars and seminars, made connections with other instructors in the industry, and asked students for their opinions. I gained a great deal of knowledge and insight from this phase of intensive observation and study, which I ultimately used to design engaging courses that included technology. These endeavors provided me with a wealth of useful information which influenced how I would approach utilizing technology in the classroom.

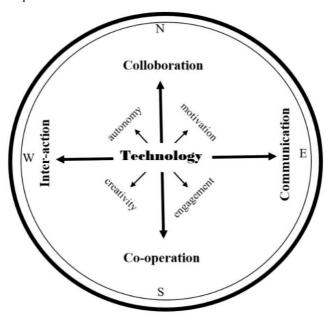
# Phase 3: Thinking about one's own pedagogical approaches

(This phase involves a thorough analysis of current teaching methods, a consideration of how technology can meet diverse student needs, and the development of a plan for meaningful technology integration).

Before introducing technology into the classroom, it is crucial to consider one's pedagogical approach and comprehend how it might improve teaching and learning. I chose to take my time applying what I had learned to my own teaching methods when I felt the time was right. I conducted a comprehensive investigation before acting, thinking carefully about the material I was teaching, asking plenty of questions about how to utilize technology in my lectures, and contemplating the possible effects of integrating technology into my students' learning experiences. To better understand technology in educational settings I studied several models and frameworks, such as TPACK (Technological Pedagogical and Content Knowledge), RAT (Replace, Amplify & Transform), PICRAT (Passive, Interactive, Creative - Replacement-Amplification-Transformation), and TAM (Technology Acceptance Model), instructional design models (eg. ADDIE, Merrill's Principles of Instruction) and made connections between theory and practice rather than putting technology before pedagogy or allowing technology to dictate what I did as a teacher educator. At the same time, it was imperative to acknowledge that integrating technology into my teaching would not only alter my pedagogical approach but also establish a dynamic interplay between the two, whereby both components would persistently impact and mold one another in the quest for more efficient and captivating educational experiences for my students. Figure 2's Whys-tech Teaching Compass may appear mysterious to some, however, I employed it as a guide for myself after learning from a variety of models and theories about the use of technology. I concluded that I should have sound reasons before utilizing any type of technology in my classroom.



Figure 2
Whys-tech Teaching Compass



The whys-tech teaching compass primarily focuses on interaction, communication, collaboration, and cooperation. I aimed to create a dynamic classroom environment that encourages idea-sharing and active student involvement by integrating technology. Key sub-aspects of my approach included supporting autonomy, creativity, engagement, and motivation. My main goal was to create a student-centric learning environment that is focused on the needs of the students, and where technology serves as a facilitator rather than a tool. In the end, using technology is like building a bridge that makes my teaching even better and helps me connect more deeply with my students. By intertwining technology with pedagogy, I aim to continually transform the classroom into a rich learning environment where students are not only consumers of information but also active creators and collaborators.

# Phase 4: Experimenting with the technology

(Educators actively engage with various technologies, seek feedback from peers, and adjust their practices based on this feedback and personal reflection).

As with anything one wishes to improve upon, it is important to practice maintaining quality over quantity by practicing the usage of the technologies you choose and being comfortable with them before integrating them into lectures. Based on my Whys-tech Teaching Compass, I determined the digital tools and technologies that were

in line with my pedagogical understanding, my learners' needs, and my teaching objectives. During this phase, I followed the trial-and-error method and learned from both my achievements and mistakes. I worked with these tools until I could utilize them with ease. I concluded that among hundreds of available digital tools and technologies, a few sufficiently met my needs as a teacher educator. Consequently, I made the decisionto take a 'less is more' stance. I concentrated on mastering a select few technologies and digital tools rather than attempting to study a broad variety of them. As I gained confidence and expertise, I worked toward consolidating and mastering the use of the technologies I chose. I am currently delving into the world of artificial intelligence tools and their potential applications in teacher training. I have gained valuable experience in this field and even started a lecture called "The Use of AI (Artificial Intelligence) in Teaching and Learning".

### Phase 5: Using technology in lectures

(In the final phase, educators implement learned strategies and tools into their teaching, evaluate the impact of technology on student engagement and learning, and commit to continual learning to enhance their teaching practices).

Finally, using technology in lectures requires continuous reflection and adaptation to ensure a cohesive learning environment that supports students' needs and outcomes. After the first four phases (and the occasional revisiting of them), I planned my lectures to integrate the digital tools and technologies I had mastered where appropriate. With every use, I observed my students' reactions to these tools and technologies and their learning outcomes. After each class, I reflected on what went well and what went wrong. With each use, I learned a great deal, and over time I deeply understood that using technology and digital tools is not in and of itself sufficient for creating a desirable learning atmosphere, but rather it depends on how one uses them to create a learning and teaching environment as an integrated ecology consisting of content, models of teaching, models of learning, and support of technology. For me, learning was an ongoing process that involved reflection on my own methods. As a teacher educator, reflective practice enabled me to intentionally consider the lessons I teach. This phase also highlighted how adaptable and ongoing my learning journey has been.

### **Discussion**

Since they have a significant influence on how teacher candidates teach in the future, teacher educators must pursue professional development and lifelong learning throughout their careers to stay up-to-date with the changing environment of education. Ceallaigh (2021) emphasizes their crucial function in educating future teachers. Fray and Gore (2018) expand on this stating that they also trigger interest and passion in teachers for teaching. In terms of training tech-effective teachers, teacher educators are urgently in need of adding technology knowledge and skills to their repertoires to develop self-efficacy for training pre-service teachers in the effective use of technology in their own classrooms. I believe that without proper background and active use of technology, teacher educators cannot properly prepare pre-service teachers for their future careers, as they are the backbones of teacher education programs.

Every learning trajectory is deeply unique and non-linear, especially when it comes to teacher educators' use of technology in the classroom. I propose a self-growth model that acknowledges this complexity, comprising five interconnected phases: realization of one's deficiencies, observing others using technology, thinking about one's own pedagogical approaches, experimenting with technology, and using technology in lectures. Importantly, these phases are not sequential but often overlap and interact in a dynamic process. In the following discussion, I will explore each of these phases in detail, examining their nuances and the way they collectively contribute to a teacher educator's development in effectively integrating technology into their teaching methodology.

The first phase of my approach is the "Realisation of one's deficiencies". As we all know, "professional development is about intentional engagement in change" (Bartimote-Aufflick et al., 2010, p. 427), which begins with being aware of our deficiencies and making a conscious effort to fill in the gaps. Self-awareness, by its very nature, stimulates the professionals' search for those aspects that need further development. Recognizing one's deficiencies not only promotes humility but also provides a clear direction for targeted learning. Acknowledging their areas of weakness allows individuals to create a targeted plan for improving both personally and professionally. This proactive mindset guarantees that individuals are actively pursuing

opportunities and resources to bridge knowledge or skill gaps rather than passively engaging in their professional journeys. In a nutshell, it is the initial move toward meaningful change in any field.

The second phase is "observing others using technology". Hendry et al. (2014) argue that teachers can merely get useful insights from observing how other colleagues teach. Peer observation is a critical aspect of this idea within education. By witnessing firsthand the strategies and methods employed by their colleagues, teacher educators (also teachers) not only gain insights into different instructional techniques but can also identify the potential advantages and limitations of various technological tools in real-time classroom scenarios. Such observations can serve as a valuable source of professional development, encouraging educators to adapt and grow in response to the ever-changing educational technology. It also promotes a sense of community and collaboration among educators, emphasizing the collective pursuit of enhancing teaching and learning experiences through technology.

"Thinking about one's own pedagogical approaches" is the third phase. This includes the need for us to reflect on our own pedagogical practice as teacher educators who shape future teachers. However, "there is little public evidence that teacher educators themselves are engaging in reflection-in-action" (Russell & Martin, 2007, p. 1175). Russell (1999) and Korthagen et al. (2006) agree that teacher educators should analyze their own teaching strategies to train better teachers. Russell (1999, p. 220) is correct in saying that "universities generally, and university-based teacher educators particularly, have no right to recommend to teachers any teaching practices that they have not themselves used successfully at the university". Because of this, it is crucial for ongoing development that teacher educators actively participate in reflective analysis and methodology adaptation.

The other remaining phases are "experimenting with the technology" and "using technology in our lectures". In the literature, the TPACK framework by Mishra and Koehler (2006) focuses on teachers, but I believe that this framework is also applicable to teacher educators who are accepted as second-order teachers (Uerz et al., 2018). For the last two phases of my self-growth approach TK (technological knowledge) is related to experimenting with the technology phase and TPK (technological pedagogical

knowledge) is related to *using technology in our lectures*. The experimenting phase is crucial for educators to adapt to the evolving technologies, ensuring active engagement rather than passive observation. During this phase, we teacher educators become acquainted with various tools and evaluate their benefits and drawbacks. After mastering this phase, the next step, using technology in our lectures, centers around making informed teaching decisions. It is not just about using technology, but integrating it effectively to enhance student engagement and understanding.

By following this self-growth approach, I believe that I can effectively use technology to create a learning environment that promotes communication, cooperation, interaction, and collaboration among students, helping them become more engaged, motivated, autonomous, and creative. I believe that effective and meaningful technology integration requires more than learning about particular technologies and digital tools. The meaningful use of technology in teaching is supported by four pillars, as illustrated in my Whys-tech Teaching Compass. All four should be taken into account when determining which technology to use, when and how to use it, and why. With this guidance, teacher educators may utilize technology to provide a learning environment where their students have many windows of opportunity to connect with the lesson content, their peers, and their teacher through various modalities of communication, cooperation, and collaboration. By purposefully using technology to create such environments, teacher educators can help teacher trainees become more engaged, more motivated, more autonomous, and more creative. Whether in online or face-to-face education, teacher educators should include technology in their lessons for strong pedagogical reasons rather than just adopting it for its own sake. In a nutshell, teaching and learning needs should drive technology choices. In this process, teacher educators should set an example and become role models for their students so that they may use technology in the classroom when they become teachers in the future. To effectively implement the self-growth approach phases I highlighted here, teacher educators must seamlessly align their technological tools with their pedagogical objectives, ensuring they cater to the learning needs of future teachers.

In my self-growth approach, which is organized into five phases, the progression might seem to be a straightforward, linear, or consecutive process.

However, a closer look shows it is more complex and nonlinear. Even though the phases are set in a sequence, my journey often revisits previous phases or blends elements from multiple ones. This happens as a result of the challenges and teaching opportunities I have as a teacher educator while utilizing technology. This nonlinear path highlights the varied and layered nature of my growth. While at times things might appear to move in a direct line, the true path is filled with diversions and intersections.

Teacher educators need to be aware of their own strengths and weaknesses when integrating technology into their practices. To effectively guide prospective teachers, they should align their pedagogical objectives with relevant technologies. While my self-growth approach serves as a guideline, it is important to understand that it is just a starting point. Teacher educators are welcome to modify it according to their own experiences and learning trajectories so they may pursue their own unique routes and even go beyond the structure I have laid out. The nuances of one's pedagogical reasoning and reflective practice can indeed modify the phases outlined here. The approach, rooted in self-study, allows educators to deeply reflect on their methods, as emphasized by Cochran-Smith and Lytle (2004), and Loughran (2005). While this approach centers on technology integration in teacher education, it can also be workable in other areas of development for teacher educators. Ultimately, to put better food on the table, effective technology integration requires more than just basic operational knowledge; educators need immersive, technology-rich learning experiences. Teachers are most adept at utilizing technology for education when it is used as a medium for their own learning, as Erben (1999) correctly points out.

Autoethnographic studies can guide teacher educators in adopting a lifelong self-growth approach, encouraging the development of better teachers through improved technology integration. I hope that the current autoethnographic study may encourage teacher educators who are beginning their journey to developing their proficiency in integrating technology into their teacher education courses to help their teacher trainees prepare for the technology-rich teaching and learning environments of their future careers. In particular, I believe that as an ongoing, cyclical practice, the self-growth approach is a form of lifelong learning that is more meaningful in terms of professional development than separate technology training and one-shot workshops and is more

likely to help teacher educators keep up-to-date with constant changes in technology. For these reasons, I have shared my own self-growth learning trajectory here as a model for other teacher educators to adopt in their efforts to learn about and integrate technology in their teacher preparation courses. I believe better teachers are the result of better teacher educators.

### **Conclusion**

The availability as well as the affordability of instructional technology are expanding, influencing classroom practices in the twenty-first century. Teachers should leave their training programs with the knowledge and abilities needed to integrate technology into their instruction in a way that is relevant to today's students. Teacher educators play a crucial role in preparing future educators in these training programs, but they frequently lack the theoretical and practical skills necessary to equip future educators with technology in an efficient manner. As a teacher educator who transitioned from being a teacher, I aim to share lessons I have learned from my experiences throughout my technology learning trajectory. Since they consider themselves to be authorities in their domains, teacher educators may find it difficult to put themselves back in the shoes of students and learn how to integrate technology into the classroom. I can understand them. However, bearing in mind that learning is the best strategy for growth, teacher educators should adopt the principle of life-long learning and seek ways to gain the necessary knowledge and skills to promote technology integration in their teacher training courses. Adopting a self-growth approach is a non-formal way for teacher educators to learn to integrate technology into their courses, a process that begins with the acknowledgment of one's own areas for improvement. My five-phase self-growth approach appears linear, but it is a nonlinear journey filled with revisits and blends, reflecting the challenges of integrating technology into education. I want to speak directly to all the devoted teacher educators out there: Think of the approach I have presented as a starting point. Every teacher educator has their own experiences and ways of learning. Feel free to mold it to fit your journey. After all, your unique teaching insights and reflections might lead you to see things a bit differently.

### **Ethics Committee Permission Information**

This study is non-invasive in nature, and as such, did not require the approval of an ethics committee.

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# Appendix A

Phase	Activity	Description
	Self-Assessment	I evaluate my current skills and knowledge in using technology for teaching.
Phase 1: Realization of One's Deficiencies	Identifying Gaps	I pinpoint specific areas where I lack proficiency or confidence.
	Setting Goals	I establish clear and achievable objectives for mimprovement.
Phase 2: Observing Others Using Technology	Learning from Peers	I watch experienced teacher educators effectively integrate technology into their lessons.
	Gathering Ideas	I collect strategies and tools that could be beneficial for my own teaching.
	Reflecting	I consider how these observed practices could be adapted to my own teaching style and subject matter.
Phase 3: Thinking About One's Own Pedagogical Approaches	Analyzing Teaching Methods	I evaluate which teaching strategies are most effective and which could be enhanced with technology.
	Considering Student Needs	I reflect on how technology can meet the diverse needs of my students.
	Planning for Integration	I develop a plan for how to integrate technology into my lessons in a meaningful way.
	Hands-On Practice	I actively use diverse types of technology to become more comfortable and proficient.
Phase 4: Experimenting with the Technology	Seeking Feedback	I gather input from peers on the use of technology.
	Adjusting Practices	I make changes and improvements based on feedback and personal reflection.
Phase 5: Using Technology in Lectures	Implementing Strategies	I apply the strategies and tools I learned and practiced into my actual teaching.
	Evaluating Effectiveness	I assess the impact of technology integration on student engagement and learning.
	Continual Learning	I stay updated on recent technologies and pedagogical strategies to continually enhance my teaching practices.

**Note:** As you look through this table, please be aware that my self-growth journey is actually nonlinear. It often involves frequent overlaps, revisits to previous phases, and adaptations based on the ongoing challenges I face and the learnings I acquire in integrating technology into my teaching practices.