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### Contextual Education and Pastoral Care in the Metaverse Era: A Learning Technology Perspective in the Artificial Intelligence Era

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### Abstract

This study explores the dynamics of education and pastoral care in the metaverse era, using an approach that integrates the latest learning technology perspectives and innovations. The metaverse era, which presents an interactive three-dimensional virtual space, offers new opportunities for face-to-face educational and pastoral practices. This study highlights the practical implementation of the use of metaverse platforms as learning media in pastoral care. The research method used is a qualitative study. The results of the study confirm that the metaverse is not only a tool for technological innovation but can also be a new space for strengthening faith communities and in-depth spiritual interactions. It identifies the need to develop pastoral models that consider theological values, digital ethics, and sensitivity to local cultural contexts. Synergy between spiritual heritage and cutting-edge learning technology is needed to shape relevant and humanistic educational and pastoral practices.

Keywords: Education, Pastoral, Metaverse Era, Learning Technology

### 1. Introduction

The development of information and communication technology in the digital era has brought about major transformations in various aspects of life, including education and pastoral care. The metaverse, a virtual space that broadly integrates the real and digital worlds, opens up new dimensions in the delivery of educational and pastoral care. The metaverse concept, which combines virtual reality, augmented reality (AR), and virtual reality (VR), enables immersive and collaborative interactions in a three-dimensional digital environment (Mystakidis, 2022; Dionisio *et al.*, 2013) [12, 7]. In the context of Catholic educational and pastoral care, this phenomenon presents both opportunities and challenges in developing a service model that is relevant, effective, and meaningful for the congregation in the digital age.

Catechesis and pastoral care have long been firmly rooted in the interpretation and application of biblical teachings as theological and spiritual foundations. As Tarihoran & Gaol (2020) [19] explain Catechesis, also a process of faith learning, aims to echo, introduce, deepen, articulate, and instill Christian values in the lives of the congregation. Meanwhile, in the pastoral context, it is oriented toward providing concrete accompaniment and service to the congregation who carry out and inspire church activities in building a community of faith (Bishop *et al.*, 2022; Apostolik *et al.*, 2022; Sullivan & Sullivan, 2016) [22].

Building faith communities in an era of technological and educational advancements is an option that deserves in-depth exploration. Learning technology has the potential to facilitate more personalized, interactive, and multisensory learning experiences. From a contemporary pedagogical perspective, digital technology-based learning models can expand the reach and access of the congregation to faith education (Cabellos *et al.*, 2023; Voelpel & Han, 2005; Mayer, 2009; Siemens, 2005) [5, 21, 28, 30]

Examining educational and pastoral perspectives, the use of the metaverse as a ministry medium should not undermine biblical values, but rather should become a means of living that supports authentic expressions of faith in the contemporary context.

Research examining the integration of educational and pastoral care with metaverse technology within the context of biblical theology remains limited. Most of the related literature focuses on general aspects of digital technology and learning without specifically linking them to Catholic catechesis and pastoral care, let alone within a systematic framework that combines theological approaches and modern learning technologies (Spector & Merrill, n.d.; Buchanan & Gellel, 2015; Rheingold, 2000; Johnson, 2021) [16, 4, 29, 27].

Furthermore, pastoral care and learning in the metaverse era enable the formation of new faith communities independent of physical geographic limitations, opening up opportunities for broader inclusion and participation, especially for younger generations who are already very familiar with the digital world. However, on the other hand, the risks of alienation, loss of social values, and difficulties in forming personal relationships also need to be monitored and considered (Turkle, 2011) [31]. A multidisciplinary approach involving theology, pedagogy, and information technology is essential for this ministry to be not only technically innovative but also spiritually and humanly meaningful.

In the context of the metaverse, we face a series of challenges that include moral issues, identity confusion, and the impact of virtual environments on individuals' mental and spiritual health. In this context, catechetical education serves as a primary guideline, emphasizing the importance of maintaining moral integrity, finding identity in a relationship with Christ, and caring for the overall well-being of the soul. Therefore, in facing the complex dynamics of the metaverse, pastoral care needs to adapt an approach rooted in biblical principles and catechetical education. This includes providing detailed guidance, modules, or applications to help individuals understand and address the moral challenges of identity shifts that may arise in the digital realm. Strong and sustainable guidance enables them to address the impact of virtual environments on their mental and spiritual health holistically (Aurelia Omersi et al., 2023; Hadi et al., 2025)

Exploring the values of catechetical education in the metaverse era and the era of artificial intelligence can provide a solid foundation for navigating the digital world, providing a spiritual foundation for navigating the ever-evolving complexity of technology, helping individuals find peace, truth, and purpose in life amidst the turmoil of modern technology (Rangga, 2024; Bingaman, 2020; Wolomasi et al., 2025) [14, 33, 23]. In other words, the presence of the metaverse can create a caring and supportive community, and provide guidance in line with the values of love and truth found in the Bible. In a metaverse-based pastoral context, it becomes a resource and hope for individuals faced with various challenges in the virtual world. With this approach, pastoral care and education are expected to provide a solid foundation for individuals to face the problems that arise in the metaverse, while maintaining a moral and spiritual balance rooted in biblical principles (Setiawan et al., 2022 & Smith, 2020) [51, 53].

Therefore, this study aims to address this need by comprehensively analyzing the opportunities and challenges of using metaverse in educational and pastoral care, as well as formulating a service model that aligns with educational and catechetical principles by utilizing innovative learning technologies and the importance of integrative study of educational and pastoral care with metaverse technology from a learning technology perspective. This study offers not

only theoretical insights but also practical implications for developing adaptive church services in the face of the dynamic and ever-evolving digital era.

### 2. Method

The research method uses qualitative studies to review literature related to the educational and pastoral use of digital technology in learning, as well as an analysis of the potential and challenges of the metaverse in the context of religious life. The research method begins with a literature review to identify fundamental principles relevant to educational and pastoral concepts and to understand how these principles can be applied in digital and virtual contexts such as the Metaverse.

The research method employed a qualitative approach, with 30 respondents as data sources. Data were collected through observation, in-depth interviews, and participatory interviews with Metaverse users and pastoral care efforts conducted within the site. The data obtained were abstracted based on male and female gender. The research method investigated, analyzed, and formulated a comprehensive view of pastoral education in the metaverse by integrating theological, technological, and humanitarian aspects in accordance with biblical principles.

Theological analysis is applied to interpret the relevance of biblical passages in the context of the metaverse, strengthening the theological foundation for pastoral education practices within it. Furthermore, this research will consider emerging ethical debates, such as the limitations of bringing pastoral care into the virtual realm and how to maintain spiritual integrity in a fully digital environment. Furthermore, it requires a multidimensional approach that integrates technological aspects, pastoral counseling, and biblical teachings.

### 3. Results and Discussion

### 3.1. Education and Pastoral Care in the Metaverse

Education and pastoral care in the metaverse context is a new phenomenon that integrates advanced digital technologies with religious practices and spiritual education, particularly from a Catholic perspective. The metaverse—a virtual space that enables social interaction and immersive learning—offers extensive opportunities but also demands an approach that is sensitive to local theological and cultural values (Di *et al.*, 2025) <sup>[6]</sup>.

In the realm of pastoral care, the metaverse paves the way for virtual spiritual care and faith community, such as prayer meetings, pastoral consultations, and interactive liturgies. A study by Dwiraharjo (2020) [8] shows that church pastoral care in the digital age needs to offer care that combines spiritual communication with multimedia technology, maintaining continuity of service and a strong presence, even when physically distant. Pastoral approaches in the metaverse must address cultural sensitivity while affirming the core values of love, forgiveness, and community, which are at the heart of Christianity.

Furthermore, the formation of faith communities in the metaverse has the potential to build global solidarity that transcends geographical boundaries, while remaining rooted in local wisdom as a pillar of the spiritual identity of the congregation (Al, 2024; Bingaman, 2023; Bills, 2017). However, the main challenge remains the development of theological and ethical models that can address the authenticity of faith experiences and the risk of alienation

resulting from technological dependence. The metaverse is a diverse virtual environment, accessed through technologies such as augmented reality (AR) and virtual reality (VR) (Sukmawati *et al.*, n.d.) <sup>[17]</sup>. Pastoral counseling in the metaverse allows broader access for individuals who have difficulty accessing spiritual support conventionally. This technology allows pastoral counselors to reach individuals in various geographic locations without being limited by physical boundaries. However, in implementing pastoral counseling in the metaverse, it is important to consider ethical aspects such as privacy, security, and integrity in providing spiritual support through virtual environments (Rangga, 2024) <sup>[14]</sup>.

Overall, education and pastoral care in the metaverse era demand an interdisciplinary dialogue between technology, theology, and Catholic pedagogy to produce relevant and meaningful innovative practices. This transformation is not simply an adaptation to new technologies, but rather a reconstruction of how the Church presents faith and education in the evolving digital age. Furthermore, there are three dialogues in pastoral education:

### 3.1.1. Interactive

The meaning and value of interactivity in education and pastoral care in the metaverse era are crucial aspects defining the quality of immersive digital faith and learning experiences. Interactivity in the metaverse refers to the ability of users to actively participate, communicate, and collaborate in virtual environments built with 3D virtual reality technology. In the context of Catholic religious education and pastoral care, this interactivity is crucial for the successful transformation of learning methods and spiritual care.

Theoretically, interactivity in education increases students' cognitive and affective engagement, which impacts material understanding and the formation of a faith-based attitude. According to Mayer (2009) [28], interactive learning media can reduce cognitive load and increase knowledge retention through participatory experiences. In the metaverse, this aspect is reinforced by simulated spiritual experiences such as prayer in a virtual worship space, group discussions, or interactive and personalized exploration of Bible storylines. From a pastoral perspective, interactivity allows for

From a pastoral perspective, interactivity allows for strengthening personal relationships between the congregation and the pastorate in a more flexible and inclusive manner. Dwiraharjo (2020) [8] emphasizes the importance of a digital pastoral approach that provides space for dialogue, accompaniment, and interactive liturgical celebrations, allowing the congregation to feel connected even when physically distant. Interactivity facilitates active and responsive engagement that supports the faith community growing together in solidarity and love.

However, an important caveat regarding metaverse interactivity is the potential risk of shallow faith experiences or spiritual simulacra, where digital interactions replace the depth of real relationships between humans and God (Baudrillard, 1994). Furthermore, interactivity is required as a central element in understanding and responding to the needs of individuals within the metaverse (Dionisio, 2013; Rohiman *et al.*, 2025) <sup>[7]</sup>, as well as proactively engaging in understanding the dynamics of virtual communities and using that knowledge to build strong relationships with individuals in need of guidance (Sue, 2019) <sup>[54]</sup>.

Therefore, developing educational and pastoral models in the metaverse must prioritize the integrity of the faith experience,

maintaining a balance between technological innovation and spiritual values to avoid alienation. Thus, it is not merely a technical entertainment tool, but a strategic medium for building dynamic, personal, and communal faith experiences, as long as it is grounded in a solid theological framework, reflective pedagogy, and responsible digital ethics.

### **3.1.2. Privacy**

Privacy in the educational and pastoral context of the metaverse era is a fundamental aspect that refers not only to the protection of personal data but also to maintaining spiritual and psychological space for users in virtual environments. The metaverse, as an immersive digital space that enables social interaction and learning experiences in the form of virtual reality (VR), opens up opportunities and challenges in maintaining individual privacy, in the educational realm, in various fields such as Catholicism and pastoral care (Louw, 2024; Ottestad, 2014) [11, 13]. Privacy includes data protection in the educational context (student and educator data, the privacy of learning activities, and learner autonomy in virtual learning spaces). In line with Engel's (2022) opinion, data stored in the metaverse must be guaranteed and managed securely to avoid encryption. Privacy also means maintaining learners' rights to be able to control their participation in religious discussions or rituals without excessive pressure or supervision.

When juxtaposed within a pastoral context, the need for "privacy" in pastoral care in the metaverse requires respect for the privacy of personal conversations, prayers, and spiritual consultations. Trust and protection of this private element are the basis for the legitimacy of digital pastoral care, ensuring that people feel safe and comfortable sharing and receiving spiritual guidance (Dwiraharjo (2020) [8].

However, the metaverse also poses potential risks in the form of intentional or unintentional privacy violations, such as excessive data collection, manipulation of user behavior, or virtual reputational contamination (Prihatmanto *et al.*, 2024). Therefore, the implementation of metaverse technology in education and pastoral care requires a rigorous digital framework, data protection policies that comply with international standards, and digital literacy education for educators, pastoral care workers, and congregations.

Privacy must also be viewed holistically, not only as individual protection but also as an effort to safeguard dignity, religious freedom, and the integrity of faith communities in the digital environment. The metaverse must be able to provide a safe, inclusive space that respects the noble values underlying Catholic education and pastoral care. Overall, privacy management in metaverse education and pastoral care is a defense strategy that requires interdisciplinary collaboration between information technology, theology, ethics, and pedagogy, to ensure that digital innovation does not compromise the fundamental rights and values of the people.

### 3.1.3. Realistic

The value of realism in education and pastoral care in the metaverse era refers to the ability of virtual environments to authentically reflect and replicate aspects of the real world, enabling users to experience meaningful and practically beneficial interactions. In the context of Catholic religious education and pastoral care, this value of realism is key to ensuring that metaverse experiences are not merely digital entertainment but also deliver relevant and contextual

spiritual education and build faith communities.

Scientifically, education in the metaverse, oriented toward realistic values, emphasizes in-depth learning that can be directly applied to the social life of the community. Iswanto (2022) states that the metaverse must be able to provide a space that is not only interactive but also representative of real-life situations and values, including the cultural and spiritual contexts inherent to Catholics. This allows learning to bridge theory and practice, for example, through simulations of biblical events, experiential moral learning, and authentic community interactions in a virtual environment.

From a pastoral perspective, realistic values demand that ministry maintain the depth of personal and spiritual relationships. Dwiraharjo (2020) [8] states that although the metaverse provides a virtual space, pastoral experiences must actualize the concrete values of love, forgiveness, and pastoral care, so that the congregation feels an authentic spiritual presence. This realism also poses a challenge: how to build immersive experiences that don't force boundaries between the real and virtual worlds without losing the essence of faith.

Furthermore, the realistic value of the metaverse contains an important epistemological dimension, namely ensuring that digital media does not create alienation or identity dislocation, but rather enriches understanding of faith and spirituality in a way that is responsive to technological developments and the current needs of the congregation (Mayer, 2009) [28]. This is crucial so that the transition to digital platforms does not sacrifice the depth of catechesis and personal spiritual experience.

Critically, developing realistic values in education and pastoral care in the metaverse requires an integrative framework between technology, theology, and Catholic pedagogy that adapts to the digital cultural and ethical context. This strategy is necessary to avoid overvirtualization or simply empty, meaningless simulations. Realistic values in metaverse education and pastoral care serve as a bridge connecting the digital world with concrete faith experiences, thus providing a profoundly positive impact on the learning and spiritual training of Catholics in this digital age.

## 3.2. The metaverse is not only a tool for technological innovation, but can also be a new space for strengthening faith communities and deep spiritual interactions.

The metaverse is not simply a technological innovation tool for educational and pastoral purposes, but has evolved into a significant new space for strengthening faith communities and supporting profound spiritual interactions virtually. This concept opens up new avenues for religious and educational practices that have traditionally relied on physical gatherings, replacing or complementing traditional methods with digital media that provide immersive and participatory experiences. Scientifically, the metaverse exists as a 3D virtual environment that allows users to enter a world that visually and interactively represents physical reality with its own unique characteristics. This presents a significant opportunity to build a faith community that transcends time and space. Consistent with Harefa's (2024) opinion, the metaverse allows Catholics to interact, worship, discuss, and carry out pastoral activities collectively without having to be physically present. This virtual space provides a platform for stronger solidarity because interactions are conducted in real time and are dialogical.

In the realm of education, the metaverse offers highly dynamic and personalized learning innovations. Mayer (2009)<sup>[28]</sup> emphasized that interactive learning media like this are highly beneficial in increasing student motivation and deepening understanding. For example, simulated biblical narratives or virtual liturgical experiences enable students to actively and reflectively live their faith. This encourages more meaningful learning than simply transferring material, as participants actively participate in a more emotionally and spiritually authentic context.

Meanwhile, from a pastoral perspective, the metaverse offers new ways for spiritual ministry that are more inclusive and accessible to all. Dwiraharjo (2020) [8] emphasized that digital pastoral care must be able to provide an authentic presence, supporting congregants in prayer, counseling, and virtual community. Pastoral interactions in the metaverse bridge geographical and social barriers, providing a space for congregants who find it difficult to physically attend to still experience a vibrant and supportive faith community.

However, an equally important critical aspect is how to ensure that these virtual spaces do not become mere simulacra devoid of spiritual depth. Baudrillard (1994) warned of the risks of cyberspace distorting reality and losing the authentic meaning of faith experiences. Therefore, the use of the metaverse must be balanced with the development of a theological and ethical framework that strengthens the meaning of spiritual interaction and community.

### 3.3. Efforts to develop a pastoral model that takes into account theological values, digital ethics, and sensitivity to local cultural contexts.

Developing a pastoral model that considers theological values, digital ethics, and sensitivity to local cultural contexts is a multidimensional challenge that requires a holistic approach. Scientifically, this development model must be grounded in sound theological principles, consistent with Catholic teachings, and responsive to contemporary social and technological dynamics.

First, the development of a pastoral model must integrate the theological values that underlie church ministry, particularly the teachings of love, forgiveness, and community (Bevans, 2002). Contextual theology serves as the foundation for pastoral care to be inseparable from the realities of people's lives, enabling pastoral care to address both the spiritual and social needs of the community. This requires ongoing dialogue between Scripture, Church Tradition, and the anthropological experiences of the congregation to ensure authentic and relevant pastoral care (Bevans, 2002).

Second, the development of digital technology demands a strong ethical dimension in pastoral care. A digital-based pastoral approach must provide inclusive, transparent services and protect the privacy of the congregation (Omersi, 2023) [43]. Digital ethics is the foundation for pastoral interactions in cyberspace that maintain human dignity, avoid degrading data, and uphold honesty and responsibility. Virtual community-based pastoral care needs to foster a participatory and egalitarian environment, not a hierarchical or exclusive one (Prasetya *et al.*, 2013).

Third, sensitivity to the local cultural context is crucial to ensure that the pastoral model is not homogenous or universalistic, ignoring the cultural diversity of the community. Cultural adaptation must be carried out with respect for local traditions and values, while still contextualizing the Gospel message in a meaningful and

relevant way (Herman, 2023). An anthropological approach helps educators and pastoral workers understand local symbols, rituals, and expressions of faith, making ministry more effective and acceptable to the community.

Concrete efforts that can be undertaken include: training pastoral staff in digital literacy and ethics; developing culturally friendly digital development platforms that are easily accessible to local communities; and creating community-based pastoral care methods that prioritize dialogue and active congregation participation (Aripafi, 2024). Pastoral models must also be flexible to accommodate changes in technology and congregation demographics while maintaining spiritual and social values.

Overall, a pastoral development model that considers theological values, digital ethics, and local cultural sensitivity is an interdisciplinary process that requires collaboration between theologians, technologists, anthropologists, and religious communities. This model will not only increase the effectiveness of pastoral care but also strengthen the cohesion of faith communities in an increasingly complex and digital world (Di *et al.*, 2025; Zega *et al.*, 2023) [6, 24].

## 3.4. Synergy between spiritual heritage and the latest learning technology in shaping relevant and humanistic educational and pastoral practices in the digital era.

The synergy between spiritual heritage and learning technology is exchanged in forming relevant and humanistic educational and pastoral practices in the digital era, a multidimensional approach that integrates traditional religious values with technological innovation to provide a more effective, inclusive, and contextual faith and learning experience.

First, spiritual heritage serves as the primary foundation that holds moral values, ethics, and transcendental meaning in education and pastoral care. These values are derived from religious teachings, church traditions, and spiritual experiences that have been passed down through generations. In the Catholic context, this spiritual heritage emphasizes love, forgiveness, and character formation oriented toward the common good and service to others (Bevans, 2002).

Second, progressive learning technologies, such as e-learning platforms, augmented reality (AR), virtual reality (VR), and the metaverse, open up new possibilities for education and pastoral care to reach broader and more diverse audiences in interactive and participatory ways (Mayer, 2009) [28]. In the digital age, these technologies enable personalized learning, simulated biblical experiences, and pastoral care that transcends the constraints of space and time, thus addressing the practical and social challenges of modern faith life.

This synergy must be built through three main principles. First, theological authenticity and fidelity: technology should be used to enhance, not replace, spiritual experiences and teachings, thus integrating theologically sound teaching values (Herman, 2023). Second, digital ethics and responsibility: privacy protection, accessibility, and inclusivity must be operational standards so that technology supports equitable services and respects human dignity (Omersi, 2023) [43]. Third, local cultural sensitivity: technology and learning content must be contextually adapted to respect the cultural diversity of the community and avoid the dominance of a homogenous global culture (Prasetya *et al.*, 2013).

This approach produces humanistic educational and pastoral practices with a dialogical character, responsive to the needs of students and the congregation, and capable of facilitating dynamic and relevant faith growth. Thus, the synergy between spiritual heritage and digital technology is not merely a technical transformation, but a reconstruction of educational and pastoral paradigms to make them more inclusive and sustainable amidst changing times.

Globally, successful examples of this synergy can be seen in the use of church digital platforms for catechetical education, virtual prayer services, and faith communities that function as spaces for dialogue and spiritual strengthening that recognize no geographical boundaries (Dwiraharjo, 2020) [8].

### 4. Discussion

There are three topics that can be discussed in this research covering complementary technical, ethical, and cultural aspects, providing a comprehensive framework for studying education and pastoral care from the perspective of technology and AI learning in the metaverse era.

### 4.1. Transforming the Dynamics of Religious Learning and Pastoral Care Through Metaverse and AI

The discussion topic "Transforming the Dynamics of Religious Learning and Pastoral Care Through Metaverse and AI" demonstrated that the development of metaverse technology and artificial intelligence (AI) has significantly contributed to shaping a new paradigm for education and pastoral care that is more interactive, immersive, and personalized. Previous research indicates that the metaverse can create religious learning experiences that transcend the boundaries of physical space and time, where learners not only passively receive material but also actively engage through virtual simulations of spiritual experiences (Amrullah, 2024).

The use of AI in this context facilitates personalized learning while helping teachers and pastoral care workers identify individual needs and provide appropriate responses based on their spiritual and intellectual development (Alfyn, 2025). Furthermore, virtual reality (VR) and augmented reality (AR) technologies integrated into the metaverse enable students and congregations to experience religious rituals and biblical narratives in a more immersive and contextual way, fostering strong emotional and spiritual engagement (Tamami, 2024). However, research also highlights significant challenges, such as unequal access to technology, infrastructure readiness, and the need to develop digital literacy for educators and pastoral care providers to maximize the potential of technology without losing the essence of religious values (Elman, 2024). Furthermore, digital ethics is a primary concern, particularly in maintaining privacy, spiritual integrity, and the authenticity of interactions in open and expansive virtual spaces.

Overall, the discussion confirmed that this transformation is not simply about technological innovation, but rather the reconstruction of a humanistic pedagogical and pastoral approach relevant to the digital era. The metaverse and AI have the potential to be effective tools for strengthening faith communities, fulfilling religious learning, and enhancing spiritual engagement amidst the complexities of the modern world.

### **4.2.** Digital Ethics and Privacy in Metaverse-Based Education and Pastoral Care

Discussions on Digital Ethics and Privacy in Metaverse-Based Education and Pastoral Care highlight the importance of addressing moral aspects and protecting individual data in the context of increasingly digital interactions. Recent studies confirm that the metaverse, as an immersive virtual space, demands the implementation of strong ethical standards to safeguard the integrity, privacy, and security of student and congregation data involved in education and pastoral care (Khaira, 2024).

In the educational realm, major concerns revolve around the massive collection of personal data, including interaction patterns and potentially targeted learning content. Therefore, educational institutions need to implement strict privacy and cybersecurity policies and provide digital literacy education to students and teachers so they can interact responsibly and ethically online (Mustofa, 2025) [9]. Character education in the digital era is crucial for equipping students with the concepts of empathy, honesty, and responsibility in virtual environments.

From a pastoral perspective, digital ethics encompasses protecting the privacy of spiritual conversations and respecting the personal experiences of congregants. Metaverse-based pastoral care must prioritize transparency, openness, and secure communications to ensure congregants feel safe and engaged in their interactions with pastoral care providers (Omersi, 2023) [43]. The application of technology must maintain a balance between innovation and profound spiritual values.

Furthermore, education and pastoral care also face challenges such as cyberbullying and negative interactions that can undermine the climate of faith communities. Therefore, effective digital oversight and regulation mechanisms are needed, including the active role of parents and educators in guiding the digital behavior of children and congregations (Khaira, 2024).

Overall, digital ethics and privacy are crucial foundations for the success of metaverse-based education and pastoral care. Proper management can create a safe, healthy, and consequential learning and care environment in the digital age, while simultaneously aligning with the humanist and spiritual values that characterize Catholic education and pastoral care.

### **4.3.** Cultural Contextualization and Development of Educational and Pastoral Models Based on Advanced Technology

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### 6. Conclusion

The conclusion of this study found that metaverse integration brings fundamental transformations to educational practices and pastoral care. This technology transforms religious learning and spiritual care from traditional models to interactive, immersive, and personalized experiences that transcend the boundaries of physical space and time. With AI capabilities supporting personalized content and real-time feedback, the teaching process becomes more effective and relevant to each individual student or congregation.

However, the application of this technology is not merely a technical matter. It also requires a strong theological foundation, strict digital ethics, and cultural sensitivity to ensure authentic and humanistic spiritual and educational experiences. The metaverse provides a new space for faith communities to interact more inclusively and foster spiritual solidarity, while maintaining the integrity of religious values and human dignity.

Overall, this research confirms that the collaboration between spiritual heritage and cutting-edge learning technologies, particularly the metaverse, opens a new era in relevant, transformative, and humanistic education and pastoral care in the digital age. It also brings new space and strategic value to broaden and deepen the Catholic faith community in the digital age. It is not simply a technological platform, but rather a new field for the communal and personal growth of faith, provided that its development remains grounded in authentic theological foundations and spiritual values.

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