



Innovation of Vocational Technology Education

Available online at <http://ejournal.upi.edu/index.php/invotec>



Developing module of digital communication for professional contexts

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ARTICLE INFO

Article history:

Received: 8 August 2023

Received in revised form: 22 August 2023

Accepted 31 August 2023

Available online: 31 August 2023

Keywords: 4D; digital communications; professional context; module

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ABSTRACT

This study aims to develop digital communication module that can be used by the general public for professional communication contexts. The module has been developed using the Define, Design, Development, Dissemination (4D) model: Define includes determining a digital communication platform along with the goals and etiquette needed; Design includes making a blueprint for the module; Development includes the development of the module as a whole by involving expert judgment; then Dissemination includes dissemination/publication of the module. From the Define and Design stages, the initial design of the module is obtained. Expert assessment at the Development stage shows that the module design is useful for audiences and is appropriate for dissemination with minor improvements for further dissemination in a form of a book at the Dissemination stage.

1. Introduction

The Covid-19 pandemic has further increased the use of digital communication media. The numerous conveniences offered by various web-based digital platforms, chat, images, sound, and video allow humans to communicate optimally during the implementation of the Large-Scale Social Restrictions (PSBB) policy by the Indonesian government. By maximizing the use of digital platforms, nearly all are still able to communicate well (Danet, 2020), despite the work and school from home policies.

However, the various conveniences offered by digital communication platform often raise new problems (Gunasekeran et al., 2022). Communication in the professional world, for example, which was relatively limited to occur during working hours, can now occur from any places at anytime. As if without pause, discussions related to work run 24 hours a day. Meetings that used to be held during working hours might also be held late at night these days, even on holidays. Such intense professional communication is not impossible to cause the ethics of a professional become thinner. If continues, this can lead to communication not working properly because there may be parties involved who feel uncomfortable.

As social beings, humans cannot be separated from social interaction. This makes communication an important aspect of human life (Chrisnatalia & Rahadi, 2020). Communication is the art of conveying information, including one's ideas to others (Amar, 1986). The purpose of communication is to inform, educate, entertain, and influence (Effendy, 2003). In order for communication goals to be achieved, each individual needs to be aware of and then avoid things that can hinder good communication (Dimpleby & Burton, 2020). Various ways to avoid this include:

fulfilling the perception, accuracy, credibility, control, and harmony of the communication being carried out (Chrisnatalia & Rahadi, 2020).

Communication practice has evolved over a long time, from primitive ones using sounds to using digital online platforms. Online communication involves activities including, but not limited to: reading, writing, and communicating by utilizing the internet network (Nunan & Carter, 2001). The sophistication of communication in the digital era offers various conveniences for the perpetrators. Some of the conveniences offered by this digital platform include communication that is free of space and time (Danet, 2020).

The conveniences offered have resulted in the use of various digital communication platforms increasing rapidly during this pandemic (Makeeva & Orlova, 2022). Apart from e-mail, digital platforms such as short messaging applications (WhatsApp, Telegram, LINE), social media (Facebook, Instagram, Twitter, TikTok), and virtual conferencing applications (Google Meet, Zoom, WebEx) are communication media used by almost all levels of society when the Large-Scale Social Restrictions (PSBB) policy was implemented (Assidiqi & Sumarni, 2020).

However, the conveniences offered by online platforms are also not without drawbacks. If they not used as they should, it is not impossible that ongoing communication will not run smoothly (Gunasekeran et al., 2022). This possibility increases especially when the communicating parties do not meet face to face. This can trigger misunderstandings, one of which is caused by the absence of several aspects of communication such as expression, intonation, and body language which can be directly seen in face-to-face communication. For this reason, the parties who communicate need to be careful when conducting digital communications.

Communication in a professional context requires actors to consider more things (Chagovets et al., 2020; Fuller, 2020). This is necessary considering that professional communication often involves interests above individual interests, for example the interests of institutions or companies. This more formal communication certainly has rules that are more binding than casual communication.

To conduct good communication, the parties involved need to pay attention to several things. In this regard, the politeness aspect needs to be considered both in oral and written communication (Yuliawati et al., 2020). In this context, politeness is speaking or behaving to benefit or respect other parties who are invited to communicate (Leech, 2014). This is important considering understanding and applying politeness principles and strategies in daily communication will result in a harmonious social life (Rohali, 2011).

In general, there are four politeness strategies in communicating, namely *bald on record*, *positive politeness*, *negative politeness*, and *off-record* (Brown & Levinson, 1987). *Bald on record* is shown with openness and courage which generally sounds impolite and rude. This strategy is often applied to close friends and family. *Positive politeness* maintains a positive image of the other person by expressing friendship through a common goal or position. This strategy aims to increase intimacy with the other person by showing affection, warmth, and reciprocity. *Negative politeness* is oriented towards the negative image of the other person. This strategy is preferred in communication practice because it is relatively safer for listeners. *Off-record* occurs when the speaker allows the interlocutor to interpret the meaning of any utterance during the communication. Tracked utterances can be interpreted in many ways because *off-record* strategies provide guidance and freedom.

The emergence of alternative new modes of communication certainly forces the perpetrators to adjust to each other to create good communication. The existence of various digital communication platforms such as the WhatsApp short message itself allows continuous interaction and almost eliminates space and time boundaries for its users (Mols & Pridmore, 2021). This often results in increasingly thin boundaries between communication contexts that occur. The context of formal-informal communication as well as the position of the communicator himself as an example, often has increasingly blurred boundaries with the emergence of WhatsApp media (Mols & Pridmore, 2021). If in practice one party crosses the line, the other party may feel uncomfortable which results in less-than-optimal communication (Permatasari et al., 2022). By considering the politeness and etiquette aspects of communicating using digital media, it is expected that communication will work better.

There have been a number of studies related to communication using digital platforms, especially during a pandemic. Several studies have discussed digital communication practices in the learning process (Chrisnatalia & Rahadi, 2020; Makeeva & Orlova, 2022; Permatasari et al., 2022; Yuliawati et al., 2020). In addition, there are also studies that focus on digital communication practices in a more general context (Khazim & Lase, 2020). In contrast to this research, this research focuses on the development of digital communication modules for professional contexts using the 4D development design—Define, Design, Development, Dissemination (Thiagarajan, 1974).

2. Method

This development research uses the 4D development design—*Define, Design, Development, Dissemination* (Thiagarajan, 1974) which stages can be seen in Figure 1.

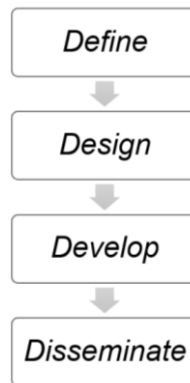


Figure 1. Stages in 4D development design (Thiagarajan, 1974)

In particular, this research includes three stages of development, namely determining the topic of discussion (*Define*), designing the module (*Design*), and developing a digital communication module for a professional context (*Development*).

Data at the *Define* stage are collected through literature, observation, and reflection. The literature includes the ones in the form of books and several latest articles related to online digital media and the etiquette of communicating using them. Observations were made on the use of digital media in general professional contexts in Indonesia. Reflection is carried out by looking at the experience of using various digital media which has so far been carried out in a professional context.

The data from *Define* stage is then analyzed and used as a reference for determining the topics of discussion in the module. The discussed topics that have been formulated are then developed into an initial draft of a digital communication module at the *Design* stage.

The initial design of this module then enters the *Develop* stage by being submitted to experts to be judged and reviewed. At this stage, experts from educators and digital communications are involved. In addition to the initial design of the module, the experts involved are given an assessment sheet to assess and provide input regarding the module being developed. This validation or assessment uses a Likert scale with a rating of 1 (very poor/the module cannot be used) to 5 (very good/ideal to use). Assessment includes module appearance, content substance, writing order, and language use. The results of the reviews and suggestions from experts are used to improve the module draft before finally entering the *Dissemination* stage.

3. Results and Discussion

3.1. Define

The *Define* stage in the 4D development model series consists of several stages. The first stage requires a *Front-end Analysis* (Initial Analysis) followed by a *Learner Analysis* (Student Analysis) (Thiagarajan, 1974). After that, a *Task Analysis* and a *Concept Analysis* are needed. After these four stages have been carried out, then *Specifying Instructional Objectives* are conducted.

Front-end analysis from the literature and observations show that the very rapid development of technology in the last decade has brought very significant changes to human communication practices in general (Makeeva & Orlova, 2022). The Covid-19 pandemic has further strengthened the communication disruptions that have occurred (Permatasari et al., 2022). The PSBB policy which severely limits all face-to-face communication in almost all sectors of human life requires them to utilize technology in communicating (Nguyen et al., 2020).

New habits that have been formed for about two years have made humans become inseparable from digital communication (Jiang, 2020). In addition to the increasingly massive use of instant messaging applications such as WhatsApp, meetings and discussions now tend to be conducted using virtual meeting applications. The existence of Google Meet, Zoom, Cisco Webex, and other virtual meeting applications is considered to greatly facilitate coordination between people, especially those that are limited by distance and time (Pratama et al., 2020). The practice of digital communication through virtual meetings seems to eliminate these boundaries. In the professional world, the use of digital communication technology by multinational companies can save hundreds or even thousands of dollars in transportation costs for board meetings. In the case of higher education, public lectures with professors from universities from different countries are relatively easier to be held because organizers can invite related professors online.

As the situation improves, the PSBB policy begins to be slowly relaxed. Face-to-face meetings and discussions began to be held. Hybrid meetings, in which there are both face-to-face and online discussion participants on one occasion, are gaining popularity (Bharwani & Mathews, 2021). However, this situation does not necessarily eliminate human dependence on the use of digital technology in communication practices. In fact, after everything has returned to an increasingly normal state, the use of digital communication remains high in both casual and professional contexts (Munir, 2022).

Aside from that, to produce effective modules, module development needs to pay attention to the target users through *Student Analysis*. Users of digital platforms in professional communication are mostly those of productive age, including students and workers. Students need a digital platform in communication practices during the teaching and learning process. Meanwhile, workers need digital platforms to perform coordination related to their work. Then, *Task and Concept Analysis* is also needed to find out the topics that must be discussed in the module. This is necessary to achieve the module initial goals during the *Define stage*.

Digital communication practices are certainly different from face-to-face communication (Danet, 2020). In face-to-face communication, the parties involved can pay attention to the speech as well as the non-verbal aspects of the interlocutor. Non-verbal aspects such as facial expressions, eye contact, expressions and other meaningful body language cannot appear all at once in digital communication. In a professional context, where the public interest is often related, understanding the message conveyed in communication is very important. For this reason, in *Task and Concept Analysis*, it is necessary to understand the concepts of communication, both casual and professional, to digital communication in a professional context.

The final analysis at the *Define stage* is the *Formulation of Learning Objectives*. The use of various digital platforms in communication practices requires its users not only to recognize the features of each platform but also how to maximize the use of each feature in it (Liu et al., 2019). This is necessary so that the exchange of messages in digital communication practices can run effectively. For this reason, in addition to understanding the concepts of language and communication at the beginning, the module's target users are also invited to understand the nature of casual and professional communication, as well as digital communication in a professional context. After they gain an understanding of these concepts, explanations regarding a number of digital platforms that are often used in the case are given. An explanation of each digital platform is also accompanied by an introduction to the features it has and the ethics of using each of these digital platforms

3.2. Design

The explanation regarding digital communication and digital applications or platforms that are often used in professional contexts becomes the foundation during the *Design* stage of the module. In order to obtain a thorough explanation of the concept, it is necessary to start discussing the topics in the module with the basic concepts of communication and language as the medium for exchanging messages. After that, the explanation narrows down to two communication contexts, namely casual and professional. The explanation is followed by an explanation of digital communication with all the characteristics and dynamics that may occur in it. After the reader understands these basic concepts, a number of digital platforms that are often used in professional context communication are given, along with the features and ethics that need to be considered when using them. In full, the learning topics discussed in the module are listed in Table 1.

Tabel 1. Topics in Module Design

Chapter Number	Discussion Topic
1	Language and Communication (<i>Bahasa dan Komunikasi</i>)
2	Communication: Casual vs Professional (<i>Komunikasi: Kasual vs Profesional</i>)
3	Digital Communications (<i>Komunikasi Digital</i>)
4	Digital Communications: Professional Context (<i>Komunikasi Digital: Konteks Profesional</i>)
5	Short message (<i>Pesan Singkat</i>)
6	Virtual Meeting (<i>Rapat Virtual</i>)
7	Social media (<i>Media Sosial</i>)
8	Streaming Platforms (<i>Platform Streaming</i>)
9	Electronic Mail (<i>Surat Elektronik</i>)

After obtaining the topic of discussion and the order of each topic in the module, the process of module development is continued by creating the initial design of the module. In the initial design, each topic of discussion was developed by providing a definition along with examples of related case. The example come from real cases or in the form of analogies that can help the reader understand a number of the concepts presented. In addition, to increase the understanding of module users, a number of illustrations in the form of tables, photos and graphics are also provided. These are expected to support the explanation in the initial design of the module as shown in Figure 2. The photos used as illustrations for the module come from the illustration team and several free photo provider platforms.

Penggunaan emoji

Penggunaan emoji dapat membantu dalam komunikasi tertulis karena ia dapat menggantikan ketiadaan komunikasi nonverbal (mimik wajah, gerakan tangan, gerakan tubuh).



Gambar 2.3. Fitur emoji pada aplikasi pesan singkat

Figure 2. One of the illustrations on the initial design of the module

3.3. Develop

After getting the initial design of the module from the *Design* stage, module development process continues to the *Develop* stage. At this stage, the initial design of the module consisting of

9 chapters was submitted to experts from educators and digital communications, to be assessed and reviewed. The content validity assessment score from the experts can be seen in Table 2.

Table 2. Content Validity Mean Score

Aspect	Mean Score
Module appearance	4.00
Content substance	4.20
Writing order	4.00
Language use	4.67
Final Score	4.22

Validity scoring by experts was carried out by judging the module appearance, content substance, writing order, and language use in the initial design of the module. Aspects of module appearance which include covers, writing, format and layout of modules generally get a score of 4. Aspects of content substance which includes rationalization of the need for book preparation, accuracy of the reasons for the purpose of developing the module, reasoning accuracy to determine the topics, rationalization of determining the topic of the book, and accuracy of references used in compiling the book gets a score of 4.2. Furthermore, the writing order aspect which includes an assessment of the idea flow and the contents of the overall chapters get a score of 4. The last aspect that is assessed for validity is related to the assessment of the language use. This aspect includes the use of standard Indonesian language, whether the writing is easy to understand, as well as the use of clear words and sentences. This aspect gets a score of 4.67 from the expert. From an average score of 4.22 obtained from the validity or content assessment carried out for each aspect, the module design is considered can be used with minor improvements.

In addition to the assessment, the experts also provide advice on each chapter in the module design. In general, the chapters related to discussing examples, features, and ethics related to digital platforms that are often used in professional context communication are well written. However, the chapters that discuss basic concepts related to digital communication need more illustrations. These illustrations are to support the discussion of various abstract concepts at the beginning of the module. After these illustrations have been added, the module design is ready to enter the final stage of module development, namely *Dissemination*, which will be disseminated in a form of a book.

4. Conclusion

The massive digital communication practices, especially after Covid-19 pandemic, open up the possibility of ineffective communication practices between people. This is due to the loss of several aspects of face-to-face communication. For this reason, it is necessary to develop a module that summarizes discussions regarding the nature of communication, types of communication, and explanations regarding a number of digital communication platforms and the ethics of using them.

Digital Communication module for Professional Contexts was developed using 4D model—*Define, Design, Development, Dissemination*. From the *Define* and *Design* stages, the initial design of the module is obtained. Expert judgement at the *Development* stage shows that the module design can be used after a little improvement. After the module design has been revised following the advice of experts, the module design can be disseminated at the *Dissemination* stage.

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