To cope with dramatically increasing problematic behaviors among primary and secondary school students in Japan, training for counseling skills is considered one of the most important areas in current teacher education. The authors have developed on a DVD (Digital Video Disc) a prototype of counseling materials to assist both in the training of college students and in-service teachers learning counseling skills. Multi-angle scenes depicting client, counselor, and complete classroom views were made of three counseling cases. The teachers, by using these DVD materials in training, can observe and analyze counseling sessions from a multilateral perspective by using the multi-video function to select and observe three-angle sequence, the multi-audio function to select and hear comments by expert supervisors, and the subtitle function to show aims and technique of each counselor during each counseling session. Evaluation results showed that this was an effective approach for learning counseling skills with the use of DVD-video. Contains 10 references. (Author/MES)
Issues in the Design and Development of DVD-Materials for Teacher Training in Counseling

Tomohiro Miyamoto  
Research and Development Department  
National Institute of Multimedia Education  
Japan  
tmi@nime.ac.jp

Delwyn L. Harnisch  
Department of Educational Psychology  
University of Illinois at Urbana-Champaign  
United States of America  
harnisch@uiuc.edu

Tsuneo Yamada  
Research and Development Department  
National Institute of Multimedia Education  
Japan  
yamada@nime.ac.jp

Yuko Hiraga  
Research and Development Department  
National Institute of Multimedia Education  
Japan  
mim-office@nime.ac.jp

ABSTRACT: To cope with dramatically increasing problematic behaviors among primary and secondary school students in Japan, training for counseling skills is considered one of the most important areas in current teacher education. We have developed on a DVD a prototype of counseling materials to both assist in the training of college students and in-service teachers learning counseling skills. Multi-angle scenes depicting client, counselor, and complete classroom views were made of three counseling cases. The teachers, by using these DVD materials in training, can observe and analyze counseling sessions from a multilateral perspective by using the multi-video function to select and observe three-angle sequence, the multi-audio function to select and hear comments by expert supervisors, and the subtitle function to show aims and technique of each counselor during each counseling session. Evaluation results showed that this was an effective approach for learning counseling skills with the use of DVD-video.

Current Issues in School Counseling and Teacher Education of Japan

During the past ten years in Japan there has been a dramatic increase in the number of cases of problematic behaviors among primary and secondary students. These include school refusal, bullying, violence inside and outside of school, committing suicide, drug usage, sexual activity, and so on. Of them, school refusal, bullying, and violence (e.g., attacking teachers, peers and residents in general and damaging equipment) are most serious at lower secondary school. The Ministry of Education, Science, Sports and Culture (MONBUSHO; 1999b) reported that the number of lower secondary schools with bullying (n = 4,684 - 44.6% of the total) and with violence inside of school (n = 3,551 - 33.8%) and outside of school (n = 2,000 - 19.1%) were at all time highs. Additionally, the number of reported cases of school refusal (more than 30 days absent) were 101,680, which showed an increase of 20% over the previous year and the highest count since MONBUSHO started keeping records.
To cope with such problems, MONBUSHO has implemented some new policies for the improvement of counseling systems in schools. They have developed a parallel approach to accomplish it. One approach is to introduce counseling specialists and clinical psychologists as school counselors into schools. This project started in 1995 with 154 schools. It is the first time in the history of Education in Japan to systematically introduce professional counselors into schools all over the country. Until then, in many cases, teachers have taken roles of counselor (Oono, 1997). Otherwise, students with problems have visited some educational institutions outside of schools and taken counseling by so-called professional counselors, who have different counselor certificates since there is no established counseling certification process in Japan. As a result, there are more than 15 kinds of certification of psychology in Japan (Sato, 1999). However, most counselors participating in this project are certified as clinical psychologists from a major nonprofit corporation supported by Association of Japanese Clinical Psychology. This certification process is being authorized widely in spite of heated arguments among professional associations of psychologists. Early results from program evaluation research on the impact of school counselors show positive effects on behavior (MONBUSHO, 1999a). As a result of these findings this project has been extended from year to year with 1,661 schools involved in 1998.

The second approach to enhancing counseling skills of teachers focuses on improving the professional skills of the teachers. Though some teachers have traditionally taken roles of counselor in schools due to lack of professional counselors, all teachers are now required to gain more counseling skills so that they can apply them to educational guidance, as well as management of the classroom, learning method, and cooperation and collaboration with parents and counselors. In Japan, training in counseling skills has not been considered as improving interpersonal and teaching skills, despite the recent research evidence (e.g., Peck, 1977; Hargie, 1984) which suggests the importance of training in these skills for teacher preparation. Now it is expected that teachers understand students deeply by utilizing counseling skills in daily communication with their classes. This view reflects the importance of teachers developing knowledge of preventive and developmental counseling skills in their professional training program.

Thus training for counseling skills is considered one of the most important areas in current teacher education. This has brought some changes to teacher education programs. There is an increasing number of training programs offering counseling for in-service teachers, while practicing teachers (license law was revised in 1998) and those in teacher training courses at universities and colleges, all need to get more credits for professional counseling. Given the high demand for counseling classes both by the pre- and inservice teachers it is important to identify the resources to meet these needs. But many faculties at the teachers colleges were not specifically trained to provide graduate courses in counseling and clinical psychology. Furthermore, there were few learning resources for teachers of college students on this topic. Given these conditions it is clear that the need for instructional materials on counseling training was very high. Kawashima and Miyamoto (1996) conducted needs assessment for instructional video materials at all national teachers colleges in Japan and the results showed the need for video materials on counseling was ranked third after technology & home economics and science.

**Purposes of Development of DVD-material on Counseling**

The primary purpose for the design and development of the instructional materials was to prepare a prototype of counseling materials to help professional students in the learning of counseling skills. We focused our materials on observation learning of counseling, which is a traditional and useful method in training for counselors. The three design objectives are as follows:

1. To provide concrete procedures and strategies of counseling through video since there are few chances for teacher training students to practice and observe counseling sessions.
2. To provide several points of view for observation and analysis of counseling since there are differences in counseling strategies among schools of counseling and clinical psychology. It is important for teachers to learn counseling skills in terms of eclecticism so that they could treat a great variety of students in school.
3. To provide flexible and interactive observation settings by using DVD-Video. It has a storage capacity of 4.7GB, more than 7 times that of CD, which is possible to record about 133 minutes Laser Disk quality or a broadcast-quality video (MPEG2), and various functions such as interactive menu (enabling random selection of contents from the menu screen), multi-video (enabling selection and switching of up to 9 types of video), multi-audio (enabling selection and switching of up to 8 types of audio), and multi-subtitles (enabling selection and switching/presentation of up to 32 types of subtitles).
We have developed materials for teacher training using DVD-Video (Yamada, 1997; Yamada et al. 1998). In our earlier efforts, we applied multi-video functions to four kinds of video recorded from a class taken at four angles simultaneously. Results from the field shows that it provided more positive effects in observational learning compared with the conventional tape-based video. Recently multimedia technology is being introduced into counselor training. For example, Engen et al. (1994) developed their materials using videodisc technology to provide realistic situations to which students can react as they deal with the microcounseling skills in the hierarchy of skills for helping professionals. However, this study is the first trial to develop DVD-materials on counseling.

![Diagram of DVD structure](image_url)

**Figure 1:** Structure of the DVD material
Features of Developed DVD-materials

First of all, we designed three types of counseling cases in terms of counselor; counseling by the classroom teacher who takes the role of counselor in the school (topic: bullying), by the school counselor to be introduced by MONBUSHO (topic: career counseling), and by the professional counselor in the school counseling center (topic: school refusal). Each counseling session was constructed using role-playing, which was based on a situation that each counselor had dealt with before. The clients were junior high school students with professional young actor/actress playing the role of the client. We constructed DVD-materials using these three counseling cases as major components (Figure 1). Each case consisted of situation settings of the case (presented in text), counseling session, and general short comments by experts (see below). We also used dual layer / single sided disk, which has a storage capacity of 8.5GB. This material contains total 256 minutes MPEG2-video. The developed materials have three key features to illustrate the following contents and functions.

Figure 2: Example of Sub Menu (Counseling Session)

Figure 3: Example of Sub Menu (Short Comments)

The first key feature is the multi-angle recording of three types of counseling cases. Each counseling session was also recorded from three angles simultaneously; with camera focused on counselor only, client only, and general view. Each counseling session was also recorded from three angles simultaneously; with camera focused on counselor only, client only, and general view.
only, and complete view. By applying multi-video function to them, it is possible to select and switch one of three sequences randomly when a video session is being played (Figure 2).

The second key feature allows comments by expert supervisors on the counseling cases. Three supervisors with different opinions on counseling were recorded to go with each counseling session sequence. Applying multi-audio function to them, it is possible to select and switch each supervisor’s comments randomly during playing of each session (Figure 2). In addition to supervisors’ comments, general short comments on each counseling sessions by another expert were recorded which is possible to select from the interactive menu (Figure 3).

The third key feature allows for the printing of the subtitles for the aims and technique of each counselor. Some aims and technique of each counselor during counseling were made in forms of subtitles. Applying subtitle function to them, it is possible to select randomly whether to show the subtitles or not during playing of each session. Utilizing the functionality of the system we were able to create 24 patterns of observation for each counseling session. We established Web-site (in Japanese) (http://www.nime.ac.jp/min/cs/index.html) to provide literal protocols of counseling sessions, supervisors’ comments, and general short comments.

**Evaluation of Developed DVD-materials**

In the process of developing the DVD materials, we organized a focus group that consisted of six clinical psychologists, six educational psychologists, six expert teacher-counselors, and three professional counselors to conduct formative evaluation. They reviewed the quality of counseling sessions, supervisors’ comments, general short comments, and subtitles of three counselors’ aims and technique and usefulness of multi-functions used in these materials through several focus group sessions.

In addition, 14 teachers participated in a training program using pilot version of DVD-materials which included only teacher’s case (see Figure 1) without subtitles. The instructors presented the counseling process and its analysis using all video components (three angles of video, three supervisors’ comments, three general short comments) and functions (multi-video and multi-audio). After their lecture, they rated usefulness of each content and function using a 4-point scale (very useful, useful, more or less useless, and completely useless). The results showed that more than 10 teachers answered ‘useful’ to every content and function probe, with the multi-video function and supervisors’ comments rated as ‘very useful’ by more than 10 of the 14 teachers.

Based on these formative evaluations the materials were revised and completed in March, 1999. We distributed these materials and questionnaires to all national teachers colleges and teacher training centers of all prefectures and asked them to evaluate it after using it for one academic year (April, 1999 to March, 2000). As the first step of evaluation, we especially focused on practical usefulness in terms of instructors who taught classes on counseling at teachers college or training program for in-service teachers. In the second step, we are planning to objectively evaluate by measuring learning effects an addition to the results from this subjective evaluation. Considering the costs of time for developing multimedia products like this material, however, a formative evaluation by experts using the focus group approach seemed to be the most practical method.

**Conclusion**

The collaborative effort of multimedia developers working with professional teaching/counseling experts is reflected in this project. The result is that the authors along with the professional researchers from the counseling community created a multilateral learning environment for students to observe and analyze the counseling process. Such learning resources have the potential to provide a rich context for considering multiple strategies as well as providing a chance to hear from experts their opinions regarding the counseling process based on a field based context.

The potential of DVD materials for instructional skill development is illustrated with the multilateral and multi-functionality that reflects the diversity of classrooms and the multiplicity of views for the training in the counseling process. A review of the competencies needed for the counseling certificate are needed to be matched with the counseling training skills in the design of future DVDs to maximize the support from the teacher training centers for the use of these materials. In addition, computer-based DVD technology, such as
DVD-ROM and DVD-RAM, more established and popularized would be great potential as a medium combined with Internet (Yamada, 1998).

These materials and questionnaire have been distributed to all national teachers colleges and teacher training centers of all prefectures in Japan. The questionnaire was designed for subjects not only to rate some scales, but also to write how they used this material in practice. This material was designed to allow users multiple ways to serve their educational clients. This flexibility of use is one of the natural attributes of multimedia products. Therefore, it is important for users to be presented several examples of how to use the educational materials, though examples might converge on particular patterns of use finally, rather than to be provided a single model.

References


Acknowledgments

The DVD-teacher training materials are distributed freely by simply making a request via the email. Please submit your requests by emailing to the following address: mim-office@nime.ac.jp.
NOTICE

REPRODUCTION BASIS

☑ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☑ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (9/97)