

e-Learning and Karate:

Leveraging Electronic Learning Tools and Techniques to Teach

This Ancient Art of Combat

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## Introduction

As part of their academic program, students in the School of Human Kinetics at Laurentian University must take a series of activity courses. In addition to the anatomy, physiology, perspectives of sport, and other theory courses, students are exposed to activities such as hockey, soccer, diving, skiing, etc. One of these courses is Karate (course code PHED/EDPH 3269: Karate).

Karate, in fact all activity courses, are designed for in-person participation. Students are expected to report to the gym/arena/field/court and, to put it bluntly, "sweat it out". Karate, in particular, has cultural and historical elements that suggest that it would not lend itself very well to being taught through e-learning so instructors do not naturally think of online pedagogical tools as a viable option to share their knowledge and art. I contend that an e-learning component added to the in-person meeting can greatly enhance the student experience and not only enrich learning but also help students reconnect to the ancient teachings of the original (founding) karate masters.

This paper explores pedagogical and practical advantages and challenges associated with attaching an e-learning component to an ancient physical discipline that prides itself on the intimate relationship and interaction between instructor and student. Traditionalists will argue that karate should not be taught by correspondence but must be experienced, and that the contact between master and student is an essential part of learning. I believe that, under the right conditions, the learning experience of the student can be enriched with a well-designed and delivered online resource.

Using the model of a flipped classroom, this paper will demonstrate how much and what type information can be conveyed through e-learning and how much must be experienced in the training hall. The ability of an instructor to convey the traditions and experience of the art without being physically present will also be explored. A variety of e-learning platforms such as podcasts, discussion boards, Skype, YouTube, clouds, and full academic suites such as Blackboard or Desire2Learn can be leveraged for this purpose.

### **Background and Context**

The traditional Japanese martial art of karate has been passed on from master to student in the classical sense (in person and face-to-face) for many generations. Although the martial arts have been around for thousands of years, karate, as it is known today was introduced to Japan and subsequently to the rest of the world from Okinawa in 1922 (Funakoshi, 1973). Students wishing to learn this art needed to find a master and request instruction. Through rigorous training and discipline, various karate techniques were taught, learned, drilled, and refined for countless hours. The exchange of information between master and student was done in person, through demonstration, feedback, and physical contact.

With a few exceptions, the original practitioners of karate were farmers, fishermen, sailors, merchants, and other trades people. Their relatively low socio-economic status restricted their access to formal education and as a result many of the first karate masters were illiterate. As a result, the art, skills, and traditions of karate were passed on orally. Aside from some very rare scrolls, transcripts, sketches, and notes, very little of karate's original teachings were ever written down (Haines, 1995). Today, there are countless books, videos, and other resources

available to students and teachers but these only serve as supplements rather than self-directed “how to” tools. The actual development, teaching, and refinement of techniques is still passed on from master to student the same way it has been done in the past: in person and face-to-face.

A well rounded karate lesson includes some theory (history, philosophy, anatomy, storytelling, etc.) along with rigorous physical training and refinement of techniques. In the days of the original masters, a student spent several hours each week in the presence of their instructor. Throughout the week, there was time for training and, during down time, the master could share his wisdom and experience. Today, however, most students train a few hours each week leaving little time for the teaching of the theoretical aspects of the art – and much less for socialising. Most instructors prefer to use what little contact time they have with their students to practice. This provides the perfect opportunity to blend ancient knowledge with modern technology.

The advent of e-learning theories, tools, and pedagogical resources provide fertile ground for the development of online teaching resources for karate instructors. Since time together is limited and instructors elect to spend more in-person time refining a student’s physical techniques at the expense of the theory, a well-crafted and balanced e-learning interface can provide limitless resources for their students. The physical nature of the discipline and the fact that practitioners must be able to demonstrate their skill limits the reach of e-learning in a student’s development so e-learning does not aim to eliminate the instructor but enhance the overall experience. Allowing students access to the instructor’s knowledge through online

tools allows the student unrestricted contact with the material. This way, learning karate is not limited to the time in the training hall. Today's student can have access to material any time much like the student of old who had the luxury of spending extra time with his master.

### **E-Learning as Applied to PHED/EDPH 3269: Karate**

It is important to note that karate training is not meant to be a short-term endeavour. There is no final exam, terminal point, or a limit to the learning. It is expected that karate practitioners, even the masters, be life-long learners and always seek to improve themselves through their art. However, the course PHED/EDPH 3269 that serves as a lens for this paper has a beginning and an end. The course is offered in 24 set classes in one academic term. There are specific learning outcomes and milestones to be achieved within a set period of time. The course is designed to provide students with an introduction to karate (see the course syllabus in Appendix I). In that light the instructor's goals for a particular cohort of student differs from the motives of a karate instructor whose students join a full-time karate school with the aim to study there for many years.

The object of the course is to provide students with a basic and general understanding of the art and sport of karate. To that end, a minimum amount of knowledge both theoretical and practical must be absorbed by students in order for them to earn their credit. The students who enroll do not see their training as a life-long commitment but rather as a 12-week crash course ending with a final written exam, a practical exam, and the reward of a mark, a credit, and a yellow belt (the first awarded rank). To achieve this, a flipped classroom model using an

e-learning platform such as Desire2Learn (D2L) lends itself very well to the transmission of theory and practical knowledge.

### **The Flipped Classroom**

Historically, the EDPH 3269: Karate course is taught in two 80 minute sessions per week over 12 weeks for a total of 24 meetings. This adds up to 32 hours of instruction time. Of these 32 hours 8 are spent warming-up, stretching, and engaging in strength-building exercises. A total of four hours are spent in theory leaving a mere 20 hours, or roughly 60% of class time for actual, physical karate practice. While this parallels the mark distribution described in the course outline (see Appendix I) it does not leave much time for deep-rooted practice.

Leveraging e-learning through the flipped classroom model would allow the instructor to deliver the theoretical portion of the course through the D2L platform leaving more time for more meaningful, physical practice.

A thorough and complete overview of areas such as the history, language, and philosophies of karate accompanied by modules describing anatomy and other aspects gives students 24-hour access to a vast database that the instructor deems valuable to the course. Repeated access provides students with reinforcement of their knowledge. Online quizzes ensure that students are getting the minimum required information and all other learning can be viewed as value added or supplemental. The material covered in the e-learning environment is then enhanced, deepened, and applied in class.

An e-learning platform goes far beyond what a textbook can provide by way of videos, podcasts, and discussion forums can help to strengthen and deepen students' exposure to

karate. Instructors can provide videos of master performances of various techniques and use audio feeds or podcasts to transmit other nuances such as proper pronunciation of the Japanese terminology. This, matched with text and visual aids prepares students for the next in-person lesson or reinforce past learning. Davie (2009) explains that “Podcasts of psychomotor skills would be beneficial as well. Students could practice with peers outside of class and have a reliable source demonstrating the correct technique” (p. 154).

H. David Brecht (2012) confirms this in his paper *Learning from Online Video Lectures*. He points out that

“Video lectures give students control of the lectures and are portable. Students can replay segments and stop the lecture as they study to understand the content. They can skip topic segments they understand. In effect, they can adjust the instructor’s delivery speed and topic selection to match their individual learning pace and interests. They can view the lecture when and where they study more effectively” (p. 245).

There is very little literature on e-learning or distance learning and sport but much has been written with regards to teaching and learning music by distance. It is reasonable to believe that the theories and best pedagogical practices that apply to the instruction of the art of music can be applied to the instruction of the art of combat.

### **Using e-Learning for Feedback – Using Music as a Model**

The flipped classroom model is ideal for delivery of the theoretical portion of a karate class but cannot be relied on for training and transmission of knowledge in the performance aspect of the art. This is the element of the discipline that is critical. Although it is a great supplement to training, the theoretical elements of the art cannot replace the ability to move properly, efficiently, and meet the expected results. Videos of master performances made available

online can provide some insight and inspiration for the student but there is no opportunity for the instructor to provide feedback.

Biasutti (2011) provides several solutions for asynchronous exchange. Using Moodle, she suggests the use of discussion boards for students to engage in activities such as reading tasks, discussion and deliberation, peer feedback, and collaborative group projects. It provides a platform for students to enter into meaningful interactions with each other and opportunities for the instructor to interject as needed. Asynchronous exchanges are scalable and can accommodate various class sizes. Students can also send video recordings of their own performance to instructor and peers for comment and feedback. Although valuable, Brecht (2012) outlines the following difficulties and limitations to the use of videos:

- videos require time and effort
- some technical skill and abilities are required for good quality videos
- videos must be interwoven with other instructional methods
- the school's infrastructure must be able to accommodate streaming and store large files (some alternatives are suggested if the school is not equipped to handle this type of exchange)

Brecht (2012) goes on to write that video lectures and instructional videos should be used to supplement classroom lectures and "That their use is not essential to complete the course and is voluntary" (p. 228). After describing various video designs and the results of their use on different subjects he concludes that "The students view all three video designs as significantly helpful for both initial learning and midterm exam review" (p. 236). He notes that students appreciate the "authoritative quality of explanations given by the course instructor as opposed to explanations given from in a campus tutoring lab" (p. 240) and this leads to lower drop-out rates.

Brecht (2012) also warns that “video lectures may be inadvisable when they enable student behaviour that undermines attention to the unique learning objectives of other instruction methods. For example, students may not attend classroom session, but instead rely on the videos to learn what they believe is needed to succeed in the course” (p. 245). It is therefore incumbent on the instructor to ensure that the videos are in fact a supplement and that core material is presented in class.

In their paper *Developing distance music education in Arctic Scandinavia: electric guitar teaching and master classes* Brändström et al. (2012) discuss the value of conducting master classes through synchronous video conferencing. They report that all participants considered video-conferencing “functional but not equivalent to face-to-face instruction” (p. 450).

Brändström et al. also report that instructors and students considered online teaching to be a positive experience” and “look upon the distance-learning situation as a fruitful complement to the traditional face-to-face teaching” (p. 451) but that “they did not want to leave face-to-face teaching” (p. 255). This suggests that video-conferencing cannot and should not completely replace in-person instruction.

A main concern with video-conferencing in music is the delay in the transmission suggesting that it is difficult for teacher and student to perform together. This may be as a direct result of the nature of the skill being taught. Synchronization is not important in the performance of karate as it is in music so this should not be much of a concern for karate instructors.

Brändström et al. (2012) noted that novice students considered “eye contact between teacher and student in a distance situation [to be] particularly important in reducing a sense of

isolation” (p. 455). However, more advanced students “considered an efficacious camera angle more important to having eye contact” (p. 455). In a meeting with master cellist David MacDonald, who provides lessons via Skype, it was explained to me that “it is critical to vary the camera angles to provide a multi-directional view for both the teacher and the student” (personal communication, June 6, 2013). This recreates the action of walking around the student that an in-person instructor would take when teaching in order to change his vantage point when assessing performance.

Brändström et al. (2012) remark that “a feature of online teaching was the increased use of questions to confirm understanding of the pupil” (p. 450) and Orman and Whitaker (2010) found that students also asked more informative questions. They attribute this to the fact that the instructor and the student do not share the same physical space and are not looking at the same (physical) reference material. This suggests that a deeper dialogue is taking place since neither student or instructor take what some would consider some of the more obvious interactions for granted.

### **Dangers of E-learning in Karate**

In every study researched, the students had at least an elementary understanding of the discipline being taught by distance education or e-learning and at one point had in-person, face-to-face instruction. Because of this, e-learning instructors did not have to concern themselves with some of the most basic aspects of the art. It is therefore advisable that instructors not rely on e-learning to introduce karate to students. E-learning supplements

should be introduced once students have a fundamental grasp on the concepts of the art and begin to need added resources to satisfy their learning requirements.

Although great potential exists to develop many more classes, the danger with instruction that relies too heavily on e-learning is that there is a valuable cultural component that risks being lost. As students progress through the ranks of karate, they take on more and more responsibility with regards to the day-to-day operation of the training hall. Every student in their own way contributes to the education of his classmate. Students constantly observe, assess, and support each other and willingly or not, serve as role models for each other. In addition, students are constantly learning how to teach karate by observing how their instructor teaches. If too much information is passed on through e-learning the data is maintained but the organic and pedagogical nuances such as a subtle touch, a glance, or a particular mannerism of the master are not transmitted. A student who has not been mentored in pedagogy either formally or informally will not have learned how to teach and will in turn, have great difficulty becoming a teacher. The oral tradition of storytelling, mentorship, and sharing is also at risk of being diluted.

In a more practical sense, karate is a martial art and as such has been developed for one purpose: combat. The only way to effectively practice combative techniques is to engage in them. This is impossible to do in an e-learning environment. Students at one point or another must engage in a physical exchange with one another. It is imperative that students apply their techniques on each other in order to learn and understand what it feels like to strike and be

struck. The subtleties of combat such as fakes, feints, manipulation of angles, distance, and timing along with other tactics cannot be learned online.

A secondary benefit to martial arts is the arts aspect of the performance. Much like a brilliant musical performance is best appreciated in person, an elegant and powerful karate demonstration should also be experienced live. The Japanese word *ki* refers to a life energy that can be felt but not measured (Kanazawa, 2002). *Ki* cannot be transmitted through video or any other distance learning medium making an in-person exchange critical.

## **Conclusion**

It is possible that the reason the original karate masters did not leverage the use of e-learning is simply because those tools were not at their disposal. If karate had been introduced to the general population in the 21<sup>st</sup> century it is perfectly conceivable that modern-day devices would have been used as a training tool. Just because the old masters did not use certain tools does not mean that we should not use them today. Using every possible means to promote and disseminate this beautiful art should be every instructor's priority. In fact, the promotional campaign "The K is On the Way" (<http://www.thekisontheway.com>), whose mandate it was to lobby the International Olympic Committee to include karate in the 2020 Olympics used many modern e-tools including social media and apps to promote its cause. One app in particular was used to teach spectators the rules by putting the user in the referee's chair. Using videos of actual matches, the app required users to make the appropriate ruling.

If teaching music is to be used as a model, the literature is clear that it is not possible to use e-learning to transmit the entire karate curriculum to students. While certain aspects such as

theoretical concepts and value-added elements can be transmitted by e-learning students must experience the art for themselves with the guidance of an instructor. A tech savvy instructor well versed in the pedagogy of e-learning can use the tools at his or her disposal to create a learning environment in the training hall and in cyberspace that could help all students, regardless of geography and learning styles, experience karate.

### **Post Script**

I have been invited to deliver the PHED/EDPH 3269: Karate class in the Winter of 2014. It is my intention to develop the e-learning component of the course during the fall of 2013 and introduce it to my students for the first time in the Winter 2014 term.

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## Appendix I

**PHED 3269: Karate**

School of Human Kinetics  
Laurentian University

**Instructor:** Charles Fink B.A., B.Ed., M.Ed. (cand.), Yondan, Jokyo  
**Tel:** 675-1151, ext. 3420  
**E-Mail:** cfink@laurentian.ca  
**Office:** Centre for Academic Excellence, J.N. Desmarais Library, room 30-218

**Schedule:** Tuesdays and Thursdays from 4:30 pm to 5:50 pm  
**Semester:** Winter 2013

The instructor is normally available at his office during Laurentian University's regular business hours – Monday to Friday from 9:00 to 4:30

**Only email messages from Laurentian University Groupwise accounts will be accepted!**

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Text

A printed *PHED 3269 Course Manual* will be distributed to each student.

Equipment and supplies

Each student must wear a white karate gi (uniform) and appropriate coloured obi (belt). These will be provided by the instructor. Mouth guards are also mandatory. Female students are permitted to wear a white t-shirt or similar apparel under their gi. Please wash your gi regularly and hang to dry.

An equipment fee of \$40 is associated with the course. This includes the gi, the obi, and all course notes. Each student is responsible for obtaining their own mouth guard.

Course Description

Karatedo literally means "the way of the empty hand" referring to a weapon-less system of self defence. In this course, traditional Japanese goals of physical and mental training are combined with modern ideals of fitness, sport, and recreation.

Objectives of the course

The purpose of this course is to introduce students to the basic techniques and underlying principles of traditional karatedo. These elements are at the foundation of all styles of karate. However, the techniques taught in this course will have a flavour typical of *Goju-ryu Karatedo*.

This course will give students the necessary skills to begin their journey and gain a sense of how instruction is done in a traditional dojo (training hall). At the end of the course, students will understand the basic ideas behind karate training, movement, and techniques. With an understanding of rudimentary concepts, students will be able to critically choose an instructor who can help to continue their training.

### Overall Structure

This 1.5 credit course will consist of two 80 minute classes per week for 12 weeks. Each class will consist of bowing in ceremonies, karate theory, warm up exercises, and training. Each class will end with cool downs and bowing out ceremonies.

### Evaluation

Written Exam	30%	March 14, 2013
Evaluation of karate techniques	60%	April 2, 2013
Participation	10%	

Karate techniques will constantly be evaluated throughout the course. The last class will consist of a formal karate rank examination. During the karate rank exam, each student will be evaluated and graded based on their progress through the course and the quality of the techniques they perform. Each performance is compared to the ideal model (a master performance) and to the performance expected of students of the same rank as the examinee. Students who complete the examination will be awarded a mark for the course and the appropriate karate rank. Students **will not** be pitted against each other for evaluation. Students are instead encouraged to support each other and help one another perform to the best of their ability.

Japanese courtesy, etiquette, and decorum will factor into the participation portion of the final mark.

### Attendance Policy

Punctual and regular attendance of this course is required of all students. Once class has begun, students may not enter without permission of the instructor. Students missing class will be greatly disadvantaged during the practical evaluations. Absences in excess of 20% may jeopardize receipt of credit for the course. A missed class will result in 2% being deducted from the participation mark; late arrivals and early departures will result in 1% being deducted from the participation mark. Exceptions will be considered due to extenuating circumstances provided it is discussed with the instructor **before** class.

### Academic Integrity

The University treats offences of academic honesty (i.e. plagiarism, cheating, and impersonation) as very serious matters. Penalties for such offences are very strictly enforced. A copy of the complete Policy on Academic Integrity is available from the Office of the Student Affairs.