

To ITV or Not to ITV: A Comparison of Hybrid and Web-enhanced Approaches to Teaching a Macro-course in Human Behavior in the Social Environment

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Hybrid education includes an online component and interaction between students and teacher by televised sound and image. This approach contrasts dramatically with traditional face-to-face teaching and classroom teaching modalities enhanced by Web-based tools. Should educators in “human behavior and the social environment” (HBSE) use hybrid technologies? This study explores the differences and similarities in student satisfaction and learning outcomes between a hybrid and a face-to-face Web-enhanced macro-course in HBSE. Results suggest that hybrid and Web-enhanced course delivery methods do not differently impact student learning. Students did report greater satisfaction with some but not all aspects of the hybrid sections.

KEYWORDS *Interactive television, distance education, technology, human behavior and the social environment*

Shakespeare’s Hamlet asked the existential question: Is life worth living when grief and tribulations are great? In the Shakespearian monologue, this was a philosophical question in relation to suicide. In this study, the researchers asked a less profound question: What evidence supports a shift from conventional face-to-face and Web-enhanced methods for teaching a course in human behavior and the social environment (HBSE) to hybrid

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instruction via interactive television (ITV)? The relevance of this question lies in two trends. Social work programs are increasingly delivering courses in ways other than the traditional face-to-face format, and social work educators are increasingly experimenting with new technologies to meet the needs of today's students.

The use of hybrid teaching methods in higher education has become widespread (Martyn, 2003). A major study sponsored by the Sloan Consortium (Allen, Seaman, & Garrett, 2007), for example, reported in 2004 that 55% of public higher education institutions offered at least one hybrid course, and 64% offered at least one online course. Additionally, 52% of consumers of postsecondary education had experienced at least one online or hybrid course. Social work programs have also responded to the preferences of students in rural settings, to students' interest in greater scheduling flexibility, and to professionals' interest in accessible continuing education by increasing the use of online and hybrid course delivery methods (Schoech, 2000; Stocks & Freddolino, 2000; Wernet, Olliges, & Delicath, 2000).

RESEARCH LITERATURE: NEW VERSUS OLD TEACHING TECHNOLOGIES

Several studies have examined the use of new teaching technologies in social work education. Only one study found directly compared learning outcomes, and no studies directly compared satisfaction with the face-to-face Web-enhanced modality to the hybrid (online and ITV) modality.

The research evidence does not support the superiority or desirability of Web-enhanced approaches to traditional learning. Faux and Black-Hughes (2000) compared the effectiveness of three approaches to teaching a social work history class: traditional lecture and discussion, online only, and online with classroom discussions. Contrasting pretest and posttest on knowledge improvement, the researchers found that students performed statistically better when taught by the traditional approach compared to the online-only modality. Students also preferred face-to-face interaction with teachers to online instruction, and almost half (42%) indicated that they did not learn well using the Internet-based approach. Hylton (2006) compared the learning outcomes for students taking two different versions of an undergraduate diversity course. The traditional, 3-hour, classroom-based section and the online section did not differ in their impact on attitudes or knowledge. Students in both sections reported statistically more favorable attitudes toward lesbians and gay men. Petracchi, Mallinger, Engel, Rishel, and Washburn (2005) studied the comparative effectiveness of traditional and Web-assisted modalities in an undergraduate practice class. The traditional section involved face-to-face lectures, discussion, and role-play activities. The Web-assisted section used Web tools to deliver the lectures while providing half

the time of the traditional section for face-to-face group exercises and role-plays. Thirty-six students were randomly assigned to the two different sections. The researchers reported no statistically significant differences between the two sections on assignment grades, midterm exam performance, or final videotaped exam project scores. There were also no significant differences across sections in students' ratings of ability to use varied technological applications. York (2008) compared three modes for teaching a social work administration course to graduate students: traditional, Internet delivery only, and a hybrid version (half the classes delivered through the Internet and half delivered traditionally). Learning outcomes measured included knowledge gains, course grades, and self-efficacy gains. Satisfaction ratings were also compared. The three groups did not differ on knowledge gain, self-efficacy improvement, or course satisfaction. Students achieved significantly higher grades in the traditional format as compared to the hybrid format.

A recent quasi-experimental study by Woehle and Quinn (2009) compared the achievement of graduate students in a face-to-face class to that of students in a distance education class. Forty-four students participated in two HBSE classes of similar size with the same instructor. One class used face-to-face Web-enhanced delivery. The other class was delivered using ITV and asynchronous methods. The researchers used student records to obtain predictive information about age, grade point average, and time elapsed since baccalaureate degree and a pretest measure of basic theoretical knowledge. Student achievement was operationalized as the total of scores for the assignments in the classes. The two groups were basically the same on predictor variables, and the researchers found no statistically significant differences on the dependent variable, total points, between the two groups.

Social work students have voiced some positive reactions to Web-based learning tools. Roberts-DeGennaro and Clapp (2005) investigated the perceptions of 46 graduate students in an online, Web-based social policy course. Students indicated that PowerPoint lecture notes and the Discussion Board were the most useful online tools. Almost a fourth of the students desired more personal interactions with the instructor, but more than 90% reported that they would take an online course again and would recommend this specific course to other students. Wernet et al. (2000) surveyed 39 graduate and undergraduate social work students after completing a research course and inquired about their satisfaction with WebCT, a Web-based course management system. All students found course materials on the Web site helpful. Graduate and nontraditional students made greater use of the Web-based tools than undergraduate and traditional students. Nontraditional students tended to attribute greater course involvement and improved performance to Web-based learning tools whereas traditional students attributed significant less impact to the tools.

ITV has earned mixed reviews from one set of students. Hylton and Albers (2007) reported on the appraisals of social work majors in an un-

dergraduate social work program delivered primarily by ITV. Campus-based learners differed significantly from distance students. More than half felt uncomfortable speaking in class because of the microphones and cameras, and many viewed the technology as distracting and interfering with their learning. Distant students didn't judge the technology as interference, but only 33% preferred ITV to face-to-face learning. The researchers noted also that the literature documents frequent failures of ITV equipment as a problem.

In summary, the search for guidance in weighing the relative merits of various modalities for teaching HBSE courses online methods did not answer conclusively the "ITV or not to ITV" question in regard to student satisfaction or learning outcomes. Only one study looked specifically at HBSE courses and, in that study, the researchers compared achievement but not satisfaction. Though Web-based learning tools and ITV appeal to some students, traditional face-to-face methods were generally preferred. Also, the research suggests that student factors (level, traditional or nontraditional status, and site) influence perceptions of satisfaction. As hybrid and Web-enhanced modalities are quite new, social work researchers may not have yet documented the innovative and effective developments associated with these technological innovations.

RESEARCH CONTEXT AND QUESTIONS

In response to the requests of employers and potential students located at great geographical distance from the campus of an accredited social work program, the social work department of a medium-sized university in mid-eastern United States developed programs offering graduate and undergraduate degrees at three distant sites. The rapid development of hybrid course sections for the distant sites resulted in a steep learning curve for faculty, university administration, information technology personnel, and students. Faculty members were also uncertain about the comparative effectiveness of teaching methods that shift away from traditional educational formats. After three semesters of using electronic media to deliver courses, the authors (two faculty members in the department) initiated this evaluation project: a quasi-experimental exploratory study examining student learning outcomes and satisfaction using ITV and Web-based learning tools as compared to face-to-face, Web-enhanced learning.

The study is exploratory, and the existing literature does not support specific predictions about likely differences. Five research questions were asked: What are the differences in achieved knowledge between the two course delivery methods? What are the differences in term paper quality? What are the differences in perceived achievement of course objectives? What are the differences in student satisfaction with the educational experience (degree of learning, teaching effectiveness, comfort with teaching modality,

and met expectations)? Do online learning activities correlate with successful class performance?

Allen and Seaman's (2004) definition of the hybrid (also called blended) modality for course delivery was adapted. A hybrid course typically blends online and classroom lecture and discussion methods, with the bulk of the course activity delivered online but the inclusion of some scheduled face-to-face class meetings. The hybrid course in this study used ITV to facilitate the class meetings. Using this method, classroom interaction between students and teacher occurs by sound and image transmitted digitally and viewed on a large screen. Using the television cameras, the instructors could hear and see the students at remote sites, and students could see the professor and communicate verbally with the instructor and students at other sites using microphones. Two to three face-to-face visits by the hybrid instructor were also made to each site during the semester. The online components—teaching resources and many educational activities—were computer-based. Each lecture, for example, was transformed into slide shows with the professor's narration. Students were expected to review lectures before and after coming to the classroom class. This freed ITV time for those activities and discussion that benefit from a teacher's broadcast presence. Satellite assistants facilitated interaction between teacher and students and among students at the distant sites.

Web-enhanced, face-to-face course delivery was defined as a teaching method in which traditional face-to-face meetings are held but some course activity is done online. This included discussions, assessments, and assignments (Allen & Seaman, 2004). In this study, all students met for 3 hours each week in conventional face-to-face lecture and discussion sessions. Teachers were also available in their offices for face-to-face consultation. Teaching resources such as chapter outlines, PowerPoint presentations, supplemental readings, and handouts were posted online. Students had the option to communicate with the professor via e-mail and to chat online with one another.

For this project, participants were students in one of the five sections of the spring 2008 HBSE macro-course. Two instructors (also the researchers) taught different sections of the same course. The first comparison group consisted of students in two sections of the course and used the Web-enhanced face-to-face course delivery method. One researcher (researcher 1) was the instructor for one section, and the other researcher (researcher 2) taught the other section. The two Web-enhanced sections met on the university's main campus for two 75-minute periods per week for 14 weeks.

The second comparison group was composed of three sections of the course, taught by one instructor (researcher 2) using the hybrid course modality to students in three satellite locations. The three hybrid sections met for one 120-minute period per week for 14 weeks.

The hybrid and Web-enhanced face-to-face sections used MyClasses. This computer-based system for course management and learning enhancement is the university's version of the Blackboard Learning System-Campus Edition Enterprise License, Release 8. The research project began at the start of the semester and concluded at the end of the same semester. All students in the hybrid and Web-enhanced face-to-face classes completed identical activities and course assignments. Throughout the semester, all students engaged in small- and large-group discussion and in-class activities and completed written assignments and exams. The hybrid sections differed in that students accessed the weekly lectures and participated in threaded discussions online, whereas in the Web-enhanced course, the instructor delivered the lecture content in a traditional manner. The hybrid sections also used ITV technology to guide the distant classroom learning activities. Additionally, the hybrid students were required to complete specific online activities and discussion in exchange for reduced in-class seat time.

TEACHING INTERVENTION

The course used for the study was a macro-HBSE course, the second of two HBSE courses required by students in the social work program. All sections presented the same content to their student audiences. Each instructor used the same textbooks, written assignments, and test banks, and each instructor followed the same weekly lesson plan. Both instructors implemented an approach to teaching macro-HBSE that uses exemplary models, theoretical root metaphors, and eco-maps to help students translate macro-level content about communities, organizations, and the larger social context (Forte, 2006).

This approach profiled exemplary models (theorists and practitioners) and their contributions to conceptualizing medium and large-scale social systems. Students were taught to identify the novel concepts developed by these scholarly practitioners (Addams and Germain, for examples) and practice-minded scholars (Keynes and Mead, for examples); the definitions of these concepts; and the use of these concepts to explain macro-aspects of human behavior and macro-level conditions, processes, and problems.

Diverse theory-based metaphors of the social work client, the client system, the environmental context of client behavior, and the social worker were used as teaching tools. Students learned to make connections between root metaphors of 10 theoretical perspectives (for the ecological theory, the environment is like a jungle and, for exchange theory, the environment is like a marketplace), and assumptions, concepts, propositions, and practice implications of each perspective.

Students learned how to use the eco-map as a tool for translating theory into assessment and intervention terms. For each theoretical language, students learned the concepts necessary for constructing a theory-specific eco-map based on an imagined client and examined theory-based eco-maps that portrayed the focal systems, mezzo- and macro-systems in the environment, forms of connections between systems, and typical resources exchanges as identified by the theory.

Finally, conceptual models available in each theoretical tradition were examined for their potential for teaching the application of HBSE knowledge to the task of assessment of the client as a member of macro-level systems. Priority was given to conceptual models that organize a set of independent variables related to community, organizational, and political systems to explain a dependent variable related to client patterns of thinking, feeling, acting, or interacting (competing community perceptions of the homeless, social system factors associated with volunteerism, for examples).

Course objectives included the following: to increase student knowledge of 10 theoretical perspectives; to teach students to apply theory-based conceptual models, metaphors, and maps to explain and assess selected client system problems and macro-context influences; to teach students to critically appraise theories from a social work perspective (ethics and values, evidence base, consistency with social work principles); to increase student appreciation of the merits of a range of theoretical perspectives for understanding human behavior in macro-level contexts; and to increase student understanding of the contribution of 10 theoretical explanations of diversity issues.

Research Method

An instructional review board (IRB) proposal detailing risk-benefit analysis, informed consent procedures, and confidentiality protection was developed. It was approved by the university IRB. All students enrolled in these courses were notified about the project and provided with an informed consent form. Students were considered participants if they signed and returned the informed consent form. No extra credit or reward was offered for participation, and there was no penalty for nonparticipation. The primary researchers were also the instructors and therefore were responsible for issuing grades. Therefore, the informed consent forms were submitted to the graduate program assistant who held them to maintain confidentiality of the students participating in the research until the semester was concluded. This procedure ensured that there was no bias or favoritism shown toward students who did not participate in the research. Instructors did not know which students participated or did not participate in the study until after the semester ended, grades were issued, and the graduate assistant turned over consent forms to the researchers. Participants were also assigned num-

bers. At no time were the names of the participants associated with the research findings.

Measures

Data were collected through a pretest/posttest survey of content knowledge, an integrative assignment, the final class grade, an assessment of student progress on learning objectives, and a satisfaction survey. Educational attainment was measured by the student completion of an HBSE II knowledge survey that contained items on theories, large-scale social systems, and human diversity. Students completed this 20- to 30-minute questionnaire at the beginning and end of the course. It included 50 multiple-choice items, and the items were drawn from the test banks for the two main textbooks to increase their relevance (Forte, 2006; van Wormer, Besthorn, & Keefe, 2007). The knowledge survey was administered in class for the face-to-face Web-enhanced sections and online for hybrid sections.

Students completed a final assignment that consisted of a paper assessing an adult from a multi-theoretical perspective. This assignment served as a major piece of data measuring the students' progress on the course learning objectives by their success in integrating knowledge into a simulated application. Students chose an adult client or acquaintance, interviewed the person, and identified a problem or challenge to address from multiple theoretical perspectives. Students used the multiple theories to identify the contextual factors that condition or cause the client's target challenge, including factors associated with the physical environment, society and its institutions, culture, the economy, the political structure, community systems, and the person's organizations. Students wrote a 10- to 12-page paper describing and assessing the client and integrating theoretical knowledge of theory with information gathered about the client. Papers in hybrid classes were uploaded to MyClasses for grading.

The final class grade was calculated on a 100-point scale as a summation of scores on tests and a final exam, the term paper, a report on a diversity macro-oriented research study, a presentation on the biography of a theorist, and short reflection assignments. At the end of the semester and as part of each course's evaluation process, the students also rated their perception of achievement related to each of the 10 course objectives. A Likert-type scale, ranging from 1 (excellent, fully attained) to 4 (poor, no attainment) was used.

A course evaluation tool appraising perceptions and satisfaction was developed by our MyClasses consultant with input from the researchers. Students read an introductory statement, and then answered a variety of questions. These included three items providing basic information and 28 closed-end items asking about satisfaction with various aspects of the course. Response options were typically: strongly agree, agree, neutral, disagree, and

strongly disagree. The tool ended with a set of open-end satisfaction items. What aspect(s) of the course has (have) been the most beneficial to you? What concepts in the course would you like to explore more? What concepts or content did you think should be added? What changes would you make to improve the course to make it even better?

Study Design

Because random assignment of students to different sections was not possible, the researchers used a quasi-experimental research design. Five sections were grouped into the two major modalities (hybrid and Web-enhanced face-to-face) and compared. There were two Web-enhanced face-to-face sections. Each included undergraduate social work majors at the main campus and one was taught by researcher 1 ($n = 22$) and the second by researcher 2 ($n = 23$). Three hybrid sections included students at distant sites. One was cross-listed and included graduate and undergraduate participants ($n = 11$), and the other two included graduate students only with 12 and 20 participants, respectively. Researcher 2 taught the three hybrid sections.

FINDINGS

Sample

To ensure adequate sample size for comparisons, the sections were combined by modality. The three hybrid sections totaled 43 students. The two combined face-to-face Web-enhanced sections totaled 45 students. The groups differed in age. For the Web-enhanced sections, the modal response was 18 to 25 ($n = 28$). For the hybrid sections, there was a bimodal pattern. Sixteen students reported the 26- to 35-year-old category, and 15 students chose the 18- to 25-year-old category. Table 1 summarizes basic information about the two groups. Differences in reported numbers for the tables and figures occurred because some students did not complete all measures.

There were some differences between the comparison groups that might have influenced the study's outcomes. Compared to students in the Web-enhanced sections, students in the hybrid sections tended to be older, working full-time, attending school part-time, and a bit more experienced with MyClasses course management software. Additionally, students in the hybrid sections tended to be primarily graduate students. However, program status did not totally account for the age differences or experience (i.e., there were undergraduate students who were visibly in the older age range and graduate students who were directly from an undergraduate program and were traditional-age students). Hybrid and Web-enhanced groups were fairly similar in the ratio of females to males.

TABLE 1 Demographic Description for Web-enhanced Group Versus Hybrid Group

Modality	Web-enhanced group ($n = 35$)		Hybrid group ($n = 41$)	
	Frequency	(%)	Frequency	(%)
Work Status				
Part-time	21	60	8	20
Full-time	4	11	28	68
Not working	10	29	5	12
School Status				
Full-time	34	97	23	56
Part-time	1	3	18	44
Gender				
Male	4	11	3	7
Female	31	89	38	93
MyClasses Experience				
Yes	32	91	41	100
No	3	9	0	0

Patterns of MyClasses Usage

As expected, because of the course design differences, students in the hybrid sections (as illustrated in Table 2) made greater use of MyClasses and ITV technologies. These students averaged more log-ins, reported a higher minimum number of log-ins, averaged longer online sessions, and reported a higher total hours for session time. Students in hybrid sections also made greater use of discussions and online assessments than students in Web-enhanced sections. Regarding ITV, each hybrid section was taught for the

TABLE 2 Comparisons of MyClass Usage for Web-enhanced Group Versus Hybrid Group

Section	Web-enhanced all ($n = 55$)	Hybrid all ($n = 43$)
Log-in times	3,302	6,015
Log-in mean	60 times	140 times
Sessions		
Range #	2–318 sessions	64–317 sessions
Mean time	3.5 min	7.4 min
Range time	19 min–23 hours	10–48 hours
Tools used		
1	Open Folder	Open Folder
2	Open File	Discussion
3	Assignments	Assignments
4	Discussions	Open File
5	Check Grades	Assessments
6	Who's Online	Mail
7	Mail	Who's Online

15-week class using this technology. Face-to-face Web-enhanced sections made no use of ITV.

Learning Outcomes

The findings in this section address the questions “What are the differences in achieved knowledge between the two delivery methods?” “What are the differences in perceived achievement of learning objectives?” and “What are the differences in term paper quality?” We did not find the differences in the educational outcomes between the two groups to be significant. Term papers were valued at 25 points. As indicated in Table 3, there were no statistically significant differences between the instructors’ ratings of student integrative term papers. The mean ratings on the term paper for the hybrid ($n = 43$) and Web-enhanced ($n = 44$) groups were almost identical: 22.8 points and 23.2 points, respectively.

The knowledge survey was administered at the beginning and end of the semester. Table 3 shows that there were also no significant differences between the students’ improvement on the knowledge test. The mean improvement for the hybrid group, 5.4 points, was only a negligible 1.8 points higher than the mean improvement in knowledge for the Web-enhanced group: 3.6 points.

As Table 3 indicates, there was little difference between the final grades for participants in the two different learning conditions. Students participating in the Web-enhanced face-to-face modality achieved a mean grade of 90.2, with a standard deviation of 5.5 and a 22-point range from 76 to 98 total grade points. Students experiencing the hybrid modality achieved a mean grade of 90.6, with a standard deviation of 6.3 and a 27-point range from 70 to 97 total grade points. The meager difference was not statistically significant.

When examining the participants’ rating of the achievement of course learning objectives in Table 3, there were no significant differences between the two groups. The mean achievement rating for the 41 students completing the form in the hybrid group, 1.6, was only .1 rating lower (lower is better) than the mean, 1.7, for the 38 students in the Web-enhanced group.

TABLE 3 Differences in Learning Outcomes for Web-enhanced Group Versus Hybrid Group

Measure	Web-enhanced group			Hybrid group			<i>t</i>	Sig. (two-tailed)
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Term paper	44	23.2	2.1	63	22.8	2.3	.98	ns
Knowledge gain	27	3.6	4.7	37	5.4	5.6	1.2	ns
Final grade	43	90.3	5.5	42	90.6	6.3	.3	ns
Learning objectives	38	1.7	.34	41	1.6	.25	1.7	ns

TABLE 4 Comparison of Student Evaluation of Satisfaction with Selected Aspects of Web-enhanced and Hybrid Modalities

Measure	Web-enhanced group			Hybrid group			<i>t</i>	Sig. (two-tailed)
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Learned much	36	3.9	.78	41	4.2	.87	1.46	ns
Teaching effective	38	4.1	.89	41	4.6	.63	2.77	.01*
Met expectations	38	3.9	.84	41	4.3	.79	2.44	.02*
Overall format	38	3.6	.82	41	4.1	.76	3.04	.001*

* $p < .05$.

Perceptions of Satisfaction

The findings related to the question “What are the differences in student satisfaction with the educational experience?” are displayed in Table 4. The students in the hybrid group indicated perceptions of satisfaction with the learning experience significantly higher than those in the Web-enhanced group on three items. They reported greater satisfaction in their evaluation of teaching effectiveness, in their view that the “class met expectations,” and in their satisfaction with the overall class format. There were no significant differences in satisfaction with “learning much,” but the students in the hybrid group did report a higher mean satisfaction than students in the Web-enhanced group.

MyClasses Usage and Educational Outcomes

Finally, the researchers considered the correlations between use of MyClasses tools and various learning outcomes: final grade, improvement in scores on the knowledge survey, and scores on the final integrative paper. Proponents of new teaching technologies are likely to make the case that greater involvement with and use of the Web-based learning tools would be associated with better performance. All participants in the study were grouped together. Table 5 summarizes the patterns of associations and addresses the researchers’ question “Do learning activities correlate with successful performance?”

For the 88 participants in the study, all associations are weak-to-negligible. For grade and knowledge improvement outcomes, most associations are positive, suggesting that greater usage of MyClasses tools is associated with better grades and a larger increase in knowledge scores. Sent mail is the exception. The greater the number of times students sent mail, the lower their grades and knowledge improvement. There was one statistically significant correlation, a positive association between total number of online sessions and final grade. For the term paper outcome, all the associations are negative. Apparently, the more students use MyClasses tools, the lower

TABLE 5 Relationships between MyClasses Tool Usage and Three Selected Learning Outcomes for all Participants (*N* = 88)

Grade	Selected learning outcomes		
	Knowledge	Term paper	MyClass tool usage
Number of sessions	.21*	.14	-.10
Total time online	.15	.15	-.16
Times read mail	.08	.09	-.13
Times sent mail	-.02	-.12	-.21
Times read discussion posting	.17	.22	-.03
Times posted discussion entry	.15	-.01	-.14

**p* < .05.

their scores on the final integrative term paper. Perhaps the use of online technologies diverts these students from the work necessary to write a term paper that earns a high grade.

CONCLUSION AND IMPLICATIONS

This research study is one of the first to attempt to document the level of satisfaction and progress on learning outcomes associated with two modes of HBSE course delivery. The research also reports on the assembly and pioneering of a set of assessment tools that can be refined and used in future appraisals of new educational technologies. In appraising the relative merits of HBSE macro-content instruction and seeking evidence that supports a shift from conventional face-to-face Web-enhanced methods to hybrid instruction, we are only a bit less ambivalent than poor Hamlet. Though financial and practical considerations may direct social work administrators to develop blended programs, this study does not provide a decisive answer about effectiveness. Although students tended to like the flexibility of the hybrid classes and the mean scores on learning and satisfaction indicators were generally more favorable for the hybrid group, there were no statistically significant differences in learning outcomes. Hybrid students did report greater satisfaction with several aspects of the experience than Web-enhanced students. Participation in Web-based learning activities as measured by number of sessions had a weak but positive association with final grades. This study affirms the potential of new technologies to appeal to students, but the study also suggests the need for caution in claims of superiority in teaching effectiveness for the ITV with Web-based tools modality.

There were some limitations to the study. First, students were not randomly assigned to comparison groups, and there were differences between the two groups that might have influenced the results. As discussed earlier,

students in the hybrid classes tended to be older, working full-time, attending school part-time, more experienced with MyClasses, and committed by geographical necessity to distant education. Some students at the main campus reported that they enrolled in the Web-enhanced, face-to-face section without advance notice of how it would differ from traditional classes. This may have resulted in a negative disposition. Second, there are some measurement issues. The measurement tools have not been validated beyond face validity. Third, the ITV modality presented special challenges. The instructors were novice users of ITV and MyClasses technologies. Additionally, students in the hybrid classes participating from the distant sites experienced 3 weeks of interrupted ITV class time owing to “connection to main campus” problems. Thus, the full potentials of this alternative teaching methodology might not have been realized.

Pioneers in the development of online and blended teaching approaches are offering a new set of ideas and tools for educating contemporary students. This exploratory study can provide a stimulus to teachers of HBSE and other social work educators as they deliberate about teaching methods, pedagogical strategies, professional and personal reactions, and different student orientations to Web-based teaching innovations. However, informed and resolute decisions will only follow the accumulation of additional evidence.

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