The Importance of Relevance to Student Lives: The Impact of Content and Media in Introduction to Sociology

Margot Belet

Abstract
To increase students’ engagement and achievement in introductory sociology courses, teachers should make them relevant to students’ lives. Students’ relevance perceptions may vary within the classroom, depending on the degree of fit between their sociocultural position and the teaching methods. To test this prospect, an experiment among 1,325 undergraduates distinguished the sociocultural mechanisms underlying content- and medium-related course relevance. The students viewed one of four versions of an introductory video lecture about Durkheim with (1) feminine/masculine content and (2) YouTube/verbal-anecdotal medium manipulated in its examples. The results indicate first, that students’ perceptions of the sociology course as relevant were associated with their course satisfaction and achievement. Second, matching students’ gender with gendered example content stimulated their relevance perceptions, while a mismatch decreased those perceptions. Finally, tentative evidence was found that the use of YouTube examples engaged disadvantaged students in the course without harming advantaged students’ learning.

Keywords
introduction to sociology, gender, video-based teaching, social inequality, experiment

Most sociology teachers hope for a classroom full of motivated students. The daily reality, however, often includes disengaged students lounging in back row seats, who are likely to find the taught concepts difficult to grasp. Recent Teaching Sociology articles have expressed concern about the discipline’s lack of student engagement. Sweet (2016), for instance, showed that sociology and psychology majors held a comparable position in 1970, but by 2011, psychology graduates had outnumbered sociology graduates three to one. He underlined the importance of relating sociology to students’ interests since “one explanation for why students select the major is that it fits with the biographies that they have” (p. 8). Similarly, Zipp (2012) estimated that of the vast number of students who take introductory sociology each year, only 6.4 to 8.5 percent choose to major in sociology, and less than 2 percent are awarded a sociology undergraduate degree. He too suggested that the “majority of our students are most interested in the ways in which what we teach speaks to their lives and the world around them” (p. 308).

To raise student engagement in introductory sociology courses, students should thus understand what is in it for them. Although this course relevance may be academic or career related—such as relating course topics to exam questions or job interviews—most often it is understood as the linkage of courses to students’ personal lives (Frymier and Shulman 1995; Muddiman and Frymier 2009).

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By using certain course content, teachers may however inadvertently focus on some sociocultural subgroups’ biographies, thus risking the exclusion of others. The educational use of an innovative medium too raises concerns about reinforcing sociocultural stratification, yet the current study argues that the widely popular, low-threshold entertainment character of YouTube could especially help disadvantaged students—those with parents of low cultural status, those with immigrant backgrounds, and masculine students (OECD 2010)—grasp the course’s relevance.

The study hence has two main goals: testing (1) whether students perceive introductory sociology courses as relevant if the course content matches their sociocultural position and whether such relevance is associated with their course satisfaction and/or achievement and (2) whether the learning gap between advantaged and disadvantaged students is smaller if the medium of YouTube is integrated into the introductory sociology course.

LITERATURE REVIEW

Course Relevance: A Key Predictor of Student Learning

Frymier and Shulman (1995:42–43) defined course relevance as “a student’s perception of whether the course instruction/content satisfies personal needs, personal goals, and/or career goals.” They discovered that increased relevance is positively associated with undergraduate students’ course motivation. Many other studies have found similar associations with students’ motivation (Finney and Pyke 2008), conditional reasoning (Markovits 1986), on-task behaviors (Newby 1991), achievement, and reduced test anxiety (Schönwetter, Clifton, and Perry 2002).

Such beneficial effects explain why in Wagenaar’s (2004) study, 301 sociologists rated applications to students’ lives as a key element of the introductory sociology course. McKinney and Naseri (2011) complemented this teacher perspective with a longitudinal study among sociology majors, who also most often mentioned the real-world applicability of sociology when asked what helps them feel engaged or passionate about the discipline.

Since sociology teachers and students agree on the importance of relevant teaching, it is logical that multiple Teaching Sociology articles have aimed to bridge the gap between course materials and students’ lives. Rafalovich’s (2006) students for instance performed a real-world breaching experiment, Eisen’s (2012) students created photographs of everyday situations to represent sociological topics, and Noy (2014) integrated the popular website PostSecret.com into her sociology course. Such teacher efforts seem to be paying off: Howard and Zoeller’s (2007) large-scale sample of introductory sociology students gave an average rating of 3.63 out of 5 for the item “the course improved my ability to apply what I learn in college to issues and problems I face in daily life.”

The Sociocultural Underpinnings of Course Relevance

Despite its promising learning effects, relevant teaching may not fit equally with all students. Classroom instruction interacts with both students’ nonschool experiences (at home, at work, during leisure activities, etc.) and their sociocultural characteristics (e.g., their ethnicity, socioeconomic status, and gender) (Yair 2000). When linking the sociology course to student biographies, teachers should thus always consider exactly whose biographies are being referred to. This explains why two experimental studies failed to manipulate course relevance for entire student groups at once. Frymier and Houser (1998) trained a guest lecturer to deliver either a high-relevance (familiar, local examples) or a low-relevance (unfamiliar, abstract examples) version of a public speaking university lecture but found no differences in motivation between the groups. A follow-up experiment by Behrens (discussed in Frymier 2002) employed three relevance strategies—linking course content to students’ present situation, past experiences, or future—but still discovered no significant learning differences compared to a low-relevance condition.

The gradual diversification of students in higher education over the past decades further problematizes the search for one-size-fits-all relevant teaching (Luna and Winters 2017). Although some higher education institutions—including private universities and those located in less diverse regions or even countries—still struggle to diversify their student enrollment across the United States, Bransberger and Michelau (2016:1) predicted further “consistent declines in the number of White public high school graduates and robust growth in the number of public high school graduates of color . . . in the coming years.”

As these diverse graduates enter college, the culturally responsive teaching proposed by Gay (2013:49–50) will become even more important: using “the knowledge, prior experiences, frames of reference, and performance styles of . . . diverse
students to make learning encounters more relevant.” Aronson and Laughter (2016) systematically reviewed such culturally relevant studies. Across various content areas—including mathematics, history/social studies, and English—gains were reported in test scores as well as affective measures like students’ motivation and self-perceived academic capability. Nevertheless, such studies mostly still interpreted culturally relevant teaching as helpful to the entire student group. Rarely was attention given to how its effects varied within the classroom.

**Two Types of Course Relevance: Content Versus Medium**

Some studies of course relevance had an additional blind spot: They muddled the effects of interventions related to a course’s content versus its medium, making it difficult to pinpoint the cause of learning effects. Whitley (2013) for instance took up two youth-related sociological themes (relevant content) weekly, each with a lecture with interactive features like short videos, music, or website links (relevant medium). Similarly, Tate (1995) discussed how a culturally relevant mathematics pedagogy dealt with problems experienced by students in their community (relevant content) through fieldwork with newspaper articles (relevant medium).

Both relevance types can be effective: 20 percent of Muddiman and Frymier’s (2009) students suggested using everyday content—like beer, fast food, or their lives as college students—to make courses relevant, while 19 percent mentioned popular media like movies, TV, and YouTube. Obviously, the two types interact: A music video may for instance appeal to students due to their interest in the music as well as the flashy visuals.

As discussed previously, course content may be relevant to some student subgroups yet leave others indifferent. By contrast, the use of popular course media is often assumed to resonate with the entire group of students because they share one vital characteristic: their age. It is expected that this generation whose “coming of age experiences and identity development are, more than any other time in history, mediated by a slew of multimodal texts” will perceive a course as more relevant if it uses relevant media (Redmond 2015:10). Teachers could for instance clarify sociological concepts with YouTube clips: passively, by discussing them during lectures, or actively, by asking students to upload their own videos (Andrist et al. 2014). Prior studies have shown the positive learning effects of YouTube in course subjects like mathematics (Niess and Walker 2009), African American studies (White 2009), Shakespearian literature (Desmet 2009), and English as foreign language classrooms (Mayora 2009). These past decades, *Teaching Sociology* has also published more than 30 “teaching with film” articles. Such teaching was associated with students’ interest and sociological imagination as well as their critical analysis and observation skills. In addition, it helped reduce stereotypical thinking and theory-related anxiety (Andrist et al. 2014). About half of Howard and Zoeller’s (2007) student sample said that their introductory sociology course (very) often included videos. The video-shy other half of the lecturers risks giving new student cohorts the impression that sociology is irrelevant to their media-permeated daily lives.

**Using YouTube in the Classroom: Stratification or Equalization?**

Despite this assumption of the entire current student generation as “new media natives,” research on the digital divide suggests that, like with content-related relevance, the learning effects of integrating YouTube into the classroom might depend on students’ sociocultural position. Originally, the term *digital divide* referred to the gap between people with and without access to digital technologies like the Internet. Over time however, it moved from this binary between “haves” and “have-nots” toward a more in-depth study of the differences in Internet use and/or skills of individuals with access (Livingstone and Helsper 2007). Even for the age group 18 to 24—the most connected of all Internet users—this second-level digital divide is still linked to offline sociocultural inequalities such as gender, ethnicity, and social class (Hargittai and Hinnant 2008; Robinson et al. 2015).

According to PISA data (OECD 2010), higher reading scores—the test domain most closely related to sociological topics—are usually achieved by girls, ethnic majority students, and upper-class students. Applied to the introductory sociology course, Kwenda (2011) confirmed the disadvantage of male and ethnic minority students. Moreover, the influence of social class—and especially cultural capital—to students’ educational success has been thoroughly confirmed since Bourdieu (1979) formulated his cultural reproduction theory (Kraaykamp and Notten 2016). Interestingly, the second-level digital divide largely seems to mirror the disadvantage of ethnic
minority and lower-class students while showing reverse trends regarding their gender. First, youngsters from more advantageous social class backgrounds were found to use the Internet more frequently (Livingstone and Helsper 2007), have better chances at owning their own laptop, and score higher on their weekly web hours, Internet skills, and the number of types of visited sites (Hargittai 2010). Second, Hispanic and African American students scored lower on measures of Internet resources and self-reported knowhow than their white and Asian American counterparts, although they did spend more weekly hours online (Hargittai 2010). Finally, young women claimed significantly lower levels of Internet-related knowhow than their male peers (Hargittai 2010), had Internet access in fewer places, were less likely to have it in their bedroom, and used it less frequently and for shorter periods of time (Livingstone and Helsper 2007; Robinson et al. 2015). Hence, although the feminization of education might have put male students at a disadvantage educationally (Watson, Kehler, and Martino 2010), in the online world, they maintain their dominant position.

The aforementioned studies seem to suggest that introducing new media into the classroom could reinforce existing ethnic and social class disadvantages and/or create new forms of gender inequality rather than appealing equally to the entire student group. This stratification hypothesis—the idea that media-based inequalities are linked to existing sociocultural disadvantages—is far from new (Robinson et al. 2015). Back in 1970, Tichenor, Donohue, and Olien already formulated their knowledge gap hypothesis based on the finding that the infusion of mass media information into a social system produced a greater growth in the knowledge of highly educated individuals than that of their lower educated peers. Such pessimistic claims are however opposed by the normalization/diversification hypothesis, which stresses the Internet’s potential to reduce sociocultural inequalities by making available new sources of information and opportunities that would particularly increase the capital of disadvantaged social groups (Mesch, Mano, and Tsamir 2012; Robinson et al. 2015). Inspired by this second hypothesis, for the current study, it remains possible that advantaged students already experience a match between the sociology course and their personal interests regardless of whether a relevant medium is used, while disadvantaged students especially need that medium to grasp the course’s relevance (Kraaykamp and Notten 2016). In other words, ceiling effects might occur: Introductory sociology students are required to master a set amount of knowledge to pass the course, so if advantaged students are already able to do so regardless of the course medium, then that medium could offer disadvantaged students a chance to catch up (Bonfadelli 2002). Raicham and Firpo (2011:3) explained this mechanism through the “Long Tail” metaphor: 20 percent of the students might be willing to participate in class anyway, but relevant media break down the participation barriers so that the remaining 80 percent also grasp the course’s relevance. Indeed, Yair (2000:261) finds that during relevant instruction, “students who are at risk may even be more engaged than their less troubled peers. . . . Thus, the manipulation of instruction may offset circumstances of birth and non-school lifestyles.” Luna and Winters (2017) observed a similar dynamic: Compared to a traditional lecture, a blended learning sociology course showed gains in knowledge and critical thinking for students of color but made no difference to white students’ learning.

To decide which of these opposing predictions—sociocultural stratification or equalization—is most likely to occur when introducing YouTube into the classroom, its main use—watching and creating playlists of favorite (music) videos (Mascheroni and Ólafsson 2014)—is of crucial importance. A recent large-scale study in Flanders—the Dutch-speaking part of Belgium and the current study’s context—confirmed that YouTube remains the most popular platform for streaming online (music) videos. Apart from Facebook, it is the site most visited by Flemish young adults (Mediaraven and LINC 2016). Because of this widespread entertainment function, in Bourdieu’s (1979) terms, advantaged youngsters are unlikely to use YouTube as way to distinguish themselves from their disadvantaged peers. Such distinction profit is more easily achieved by capital-enhancing uses of the Internet, which are “more likely to offer users opportunities for upward mobility than certain other types of online activities (e.g. checking sports scores, reading jokes)” (Hargittai and Hinnant 2008:607). Such uses include visiting sites about political or economic news, travel information, or stock prices. Based on a representative survey of the German population, Zillien and Hargittai (2009) confirmed that high-status Internet users more often engaged in such capital-enhancing online activities while their lower status counterparts more frequently used chat rooms. Bonfadelli (2002) found similar results in Switzerland: Individuals’ higher educational background increased their informational and service-oriented Internet use while reducing their
entertainment-related use. Furthermore, Livingstone and Helsper’s (2007) UK study discovered that the second step of youngsters’ Internet use—after basic school-related and general information seeking—is focused on entertainment and communication (e.g., gaming or emailing) while “socially valued” uses are developed later. All these studies point in the direction of YouTube being a low-threshold medium not specifically geared toward advantaged students’ digital uses or skills. Therefore, its integration into the classroom will likely have an equalizing rather than a stratification-reinforcing effect.

CURRENT STUDY AND HYPOTHESES

The study investigates the sociocultural antecedents of students’ relevance perceptions in introductory sociology courses at universities in Flanders, Belgium. This setting fits with the call for more research in postsecondary educational institutions outside of the United States (Brint 2013). Course relevance is divided into content- and medium-related relevance. For content-related relevance, the study tests whether a match between gendered course examples and students’ own gender is positively associated with their relevance perceptions as well as whether a mismatch is negatively associated with those perceptions. Why this focus on gender rather than ethnicity or class—the other two most prominent intergroup relations in day-to-day societies (Jackman 1994)? The population of Flemish university students consists of 44 percent male and 56 percent female students, while only 15 percent have at least one parent born outside of Belgium, and 75 percent have at least one parent with a higher education degree (Wartenbergh et al. 2009). In this white, upper-class setting, gender creates the clearest sociocultural division.

By contrast, for medium-related relevance, the equalizing potential of explaining the course through YouTube examples—rather than verbal anecdotes—is tested by measuring students’ perceived course relevance, course satisfaction, and achievement across subgroups related not just to students’ gender but also to the two other main axes of educational disadvantage: immigrant background and parental cultural status. Six hypotheses emerge from the literature review:

Hypothesis 1: Students’ perceived course relevance is predictive of their course satisfaction.

Hypothesis 2: Students’ course satisfaction is predictive of their course achievement.

Hypothesis 3: A match between students’ gender and gendered course examples is positively associated with their relevance perceptions, whereas a mismatch is negatively associated with those perceptions.

Hypothesis 4: The use of YouTube course examples—rather than verbal-anecdotal examples—is associated with a smaller learning gap predicted by students’ gender.

Hypothesis 5: The use of YouTube course examples—rather than verbal-anecdotal examples—is associated with a smaller learning gap predicted by students’ immigrant background.

Hypothesis 6: The use of YouTube course examples—rather than verbal-anecdotal examples—is associated with a smaller learning gap predicted by students’ parental cultural status.

METHOD

Sample

The sample consisted of 1,325 students enrolled in five introductory sociology courses at three Flemish universities. Flanders has four universities—situated in Brussels, Antwerp, Leuven, and Ghent—that offer bachelor’s and master’s degrees in sociology (VLIR 2007). For all four universities, lecturers of introductory sociology courses aimed at social sciences students were invited via email. They all accepted, except for the lecturer at Ghent University, who feared that the study would confuse his students due to his course’s differently structured curriculum: The theory discussed in the study—see the procedure section—is first discussed at the end of his course. All participating universities are nonprofits, which are not operated by but do receive substantial amounts of funding from the government (De Kock and Vercruysse 2009). Universities located in the French- or German-speaking regions of Belgium were not invited to participate because language issues would have severely complicated the study’s procedure (see the following).

Introductory sociology courses are chosen because if relevant teaching succeeds in enhancing students’ interest at this stage, majoring in sociology is still a viable option (Sweet 2016). The participating student groups ranged from small (67 students) to large (574 students), and the remaining three groups were also large enrollment courses of about 300 students. The sample reflects the Belgian
university student population regarding sex (45 percent male, 55 percent female), immigrant background (20 percent have at least one parent born outside of Western Europe), and parental education (79 percent have at least one parent with a higher education degree). The participants’ mean age is 19.2. About 16 percent were sociology and political science majors; the rest were mostly majors in theoretical economics (19 percent), management/business economics (23 percent), communication science (21 percent), law/criminology (9 percent), and psychology/pedagogy (8 percent).

Procedure
Analytically distinguishing the effects of medium- and content-related relevance requires two orthogonal experimental manipulations. A renowned sociologist was asked to give a lecture about one of the discipline’s founding fathers to a student audience and a few video cameras. Durkheim was chosen because his ideas are abstract enough to make undergraduate students doubt the relevance to their lives. This 45- to 50-minute video lecture was then edited into four versions. Most aspects (the topic, length, teaching style, instructor characteristics, etc.) remained the same in all versions as the same camera shots and audio were used. The only difference were the examples given to explain Durkheim’s insights.

Content-related relevance was manipulated through the examples’ fit with students’ gender. The instructor recorded two versions of the examples, drawing consistently from the domain of soccer versus fashion. This contrast was based on abundant research about the stereotyping of soccer as a masculine and fashion as a feminine pursuit (Parkins 2010). Obviously, such stereotypes are linked to cultural notions of femininity/masculinity rather than biological sex (Colley et al. 1996). The lecture started with the concept of organic solidarity, explained via an interview with either a makeup artist or a soccer coach. Mechanical solidarity was then clarified with a Japanese fashion photo shoot versus American soccer fan culture. Subsequently, Durkheim’s influence on Merton was briefly mentioned. Merton’s four function types were related to the impact of fashion on women’s physical self-image versus the unscrupulous working conditions at the Qatar 2022 World Cup site. Finally, Durkheim’s notion of social facts was explicated through the dress code at the Cannes Film Festival versus the rules of playing soccer.

Second, to manipulate medium-related relevance, a YouTube version of the masculine and feminine examples was created by integrating short clips into the video lecture and asking the instructor to briefly relate these to the course. In these lecture versions, the instructor’s verbal anecdotes about fashion versus football were thus replaced by YouTube clips with similar content (e.g., showing a football match instead of talking about it). Since all students watched a video lecture, this study uses the term medium to distinguish YouTube examples from verbal-anecdotal examples within that video lecture. Medium-related results should be interpreted as the added value of using YouTube in a video lecture rather than as the effectiveness of YouTube in traditional face-to-face lectures.

The experiment took place during one two-hour introductory sociology class at the start of the academic year in October 2015. At each university, the student groups were randomly divided into the four experimental conditions: verbal-anecdotal and feminine (380 students), YouTube and feminine (230 students), verbal-anecdotal and masculine (328 students), and YouTube and masculine (384 students). This randomized design is a more powerful causal test of the hypotheses than the non-equivalent comparison groups design—only used in 8 percent of Teaching Sociology articles and notes—since it controls for differences in students’ preexisting course knowledge and interest (Sweet and Cardwell 2016). When arriving at their assigned classroom, the students received a brief introduction, explaining that the lecture was part of a study about relating abstract course content to students’ interests and that they would afterwards evaluate it with a survey. Both to grab their attention and make it feel like a normal class situation, the lecture was stressed to be part of the regular exam material. Subsequently, it was shown. Immediately afterward, the students completed a survey. During the next class, they were debriefed.

The institutional review board (IRB) of the researcher’s university approved this study protocol. As Durkheim is part of the regular course material, all students who came to class watched the lecture, although they were free to leave at any time. The survey starts with a passive informed consent form that stresses the study’s anonymous nature and provides the researcher’s and IRB’s contact details. Students were informed that they could refuse to complete the survey or certain questions without any consequences. Active informed consent was not possible at this stage because disclosure of the study design could bias the results (students in the verbal-anecdotal lecture might for instance be disappointed that they had not been assigned to the YouTube version). Long-term negative learning effects were avoided by uploading all
lecture versions to the online learning platform. As the versions were standardized except for the used examples, watching those sufficed to get the best instruction.

**Measures**

The study’s independent variables are the two experimental manipulations. The course examples’ medium is coded as 0 = verbal-anecdotal examples, 1 = YouTube examples, and the course examples’ content is coded as 0 = stereotypically masculine, 1 = stereotypically feminine.

For content-related relevance, the moderator is students’ gender identity. Gender points to the imposition on a sexed body of socially constructed ideas about appropriate roles for women and men. Scott (1986) defined one of its subsets as the subjective, self-ascribed identity of real women and men. This study focuses on that self-ascribed gender identity. Dierckx, Motmans, and Meier (2013) constructed a survey measure that transcended the man/woman binary by asking respondents to indicate on two scales how masculine and feminine they feel. The current survey uses a 10-point version of those two scales. Although students could thus indicate feeling both masculine and feminine, one of both, or neither, only a tiny minority used this opportunity, as evident in the scales’ negative correlation (−.94, p < .01). Thus, the variable feminine gender identity was created by subtracting their masculinity scores from their femininity scores: Value 10 means feeling very feminine and not masculine at all, value −10 means the opposite, and value 0 means feeling equally masculine and feminine. The new construct correlates strongly (.93, p < .01) with students’ binary sex (male/female).

For medium-related relevance, the moderators are three main sources of educational disadvantage that could also affect students’ position on second-level digital divides: their gender identity (see aforementioned paragraph), immigrant background, and parental cultural status. The latter is based on students’ reports of their parents’ occupational titles, recoded as one of the 55 broad categories devised by de Graaf and Kalmijn (2001). Each category has a numeric value depending on its members’ average education, and parental cultural status (range, −1.26 to 2.57) represents the average of both parents’ values. This proxy for parental cultural capital (Bourdieu 1979) seems valid because it correlates with the number of books (.28, p < .01) and other cultural items in the parental home (.34, p < .01 with a summed scale based on dummies for possessing a piano, works of classical literature, original paintings, and a subscription to a quality newspaper). Finally, students score value 1 on immigrant background if at least one of their parents was born outside of Western Europe. This measure is inspired by the PISA concept of second-generation immigrants, whose reading scores were found to lag behind their non-immigrant peers across most OECD countries, even after controlling for socioeconomic status (OECD 2010). The focus on parents’ place of birth also fits the experiment’s Belgian context, where the adjective allochthonous is used to designate persons residing in Belgium—regardless of whether they possess Belgian nationality—with at least one (grand)parent born outside of Western Europe. This derogatory term and its associated disadvantaged social position create a strong oppositional identity not unlike the situation of blacks in the United States (Van Houtte and Stevens 2009).

The first mediator is students’ perceived relevance of the examples, assessed with the item “to what extent do the examples, used by the guest lecturer during this lecture, relate to your day-to-day life (personal interests, leisure activities . . . )?” (0 = not at all, 10 = totally). The focus thus lies on the fit with students’ lives. Frymier and Shulman’s (1995) often used course relevance scale was less useful to the current study because it focuses on explicit teacher communication behaviors: It measures whether students perceive teachers as doing their best to employ relevance strategies independently of whether these work for them personally (Leddin 2009). In fact, Frymier and Shulman (1995) used their single item about students’ actual perceived relevance—“I see how the material covered in this class applies to my world”—to satisfy criterion validity concerns for the teacher-oriented scale (.46, p < .01).

The study’s second mediator, students’ course satisfaction, is defined as their “subjective perceptions of how well a learning environment supports academic success” (Lo 2010:48). It is based on student self-reports about whether: (1) they felt competent in dealing with course tasks such as memorization and understanding (Items 1–7 in Appendix A, inspired by Choi [2005] and Wood and Locke [1987]), (2) they experienced the classroom climate as positive (Items 8–12, based on Mazer, Murphy, and Simonds [2007]), and (3) the lecture triggered their interest (Items 13–16, based on Linnenbrink-Garcia et al. [2010]). An exploratory iterated principal factor analysis reflected one
factor of course satisfaction, which explains 85 percent of the variability. All “course competence” and “triggered interest” plus two “classroom climate” items were retained. This 13–item additive index ranges from 13 to 51 and has a Cronbach’s alpha of .88.

The dependent variable is course achievement. Six multiple-choice questions about the lecture (see Appendix B) tested whether students with a higher course relevance and/or satisfaction also scored higher grades. Students receive no points per wrong answer and one point per correct answer, so course achievement ranges from 0 to 6.

Finally, one control variable was added: students’ maintained interest, as measured by eight items (e.g., “I am not very enthusiastic about what we learn during sociology” [reverse-coded] and “We learn valuable things in the sociology course”) (Linnenbrink-Garcia et al. 2010). The experiment was conducted at the start of the academic year, so students may not yet have built up many expectations about the course. Still, some of them might be inherently more interested in its topics and/or might not be taking the course for the first time. Hence, this control ensures that found differences between the experimental conditions cannot be ascribed to differences in students’ preexisting dispositions toward the course. All items were summed, and the resulting variable, maintained interest—with a Cronbach’s alpha of .90—was mean-centered (range, −17.17 to 10.83).

A moderated serial mediation model was estimated with the CALIS procedure of the statistical software SAS. The full information maximum likelihood (FIML) method was used to deal with incomplete observations. Unless stated otherwise, significance implies $p \leq .05$.

RESULTS

Perceived Relevance Is Associated with Students’ Course Satisfaction and Achievement

Table 1 summarizes the model results. First and foremost, Hypothesis 1 was confirmed: Every increase in perceived relevance was associated with a significant .74 increase in students’ course satisfaction. The second hypothesis was also supported: Students’ higher course satisfaction was associated with better course achievement (.06, $p < .01$). This effect seems small, yet course satisfaction has a range of 38, so that students who were least satisfied scored an impressive 2.28 (.06 × 38) points less on the six multiple choice questions than those most satisfied with the course.

Content-related Course Relevance: Who Perceives Which Topics as Relevant?

The third hypothesis—a match between students’ gender and gendered course examples is positively associated with their relevance perceptions, whereas a mismatch is negatively associated with those perceptions—was clearly confirmed by Table 1’s significant interaction between the example content and students’ gender identity on perceived course relevance. Keeping all other model variables constant, each increase in students’ masculinity (negative scores on feminine gender identity) strengthened their perceived course relevance with .12 units if masculine course examples were used. With feminine examples, an increase in students’ feminine gender identity was associated with a .14 increase in course relevance.

Moreover, a mismatch of the examples with students’ gender was linked to a significant decrease in course relevance: Masculine examples were rated 2.4 points less relevant (on the 10-point scale) by students who felt totally feminine (value 10 on gender identity) than by those who felt totally masculine (value −10). Figure 1 shows the interaction’s positive and negative sides.

Medium-related Course Relevance: An Equalizing Force?

Hypotheses 4, 5, and 6, respectively, expected that when YouTube course examples—rather than verbal-anecdotal examples—are used, the learning gap predicted by students’ gender, immigrant background, and parental cultural status is reduced. Table 1’s last three rows display the interactions of students’ sociocultural position with the YouTube (vs. verbal-anecdotal) course examples. Only three of these nine interactions were significant.

The first significant interaction occurred between students’ parental cultural status and the examples’ medium on their perceived relevance of the video lecture. This finding seems to be in line with Hypothesis 6 since the positive (although insignificant) association between students’ parental cultural status and their perceived relevance in the verbal-anecdotal examples video lecture was reversed when YouTube examples were used (B of −.20 instead of .14). An exploration of the interaction with Hayes’s (2013) PROCESS macro (Model 1), however,
Table 1. Unstandardized Effects of Students’ Gender Identity, Immigrant Background, and Parental Cultural Status on Course Achievement via Perceived Relevance and Course Satisfaction, Depending on the Course Examples’ Content and Medium.

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<th>Course Satisfaction</th>
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<td>Feminine (vs. masculine) course examples</td>
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<td>−.02 −.32 .40</td>
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<tr>
<td>YouTube (vs. verbal-anecdotal) course examples</td>
<td>.04 .29* .14</td>
<td>.03 −.08 .46</td>
<td>−.03 −.04 .10</td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived relevance</td>
<td>1 .23** .74** .09</td>
<td>−.01 −.04* .02</td>
<td></td>
</tr>
<tr>
<td>Course satisfaction</td>
<td>.23** 1 .25** .06**</td>
<td>.01 .25** .06** .01</td>
<td></td>
</tr>
<tr>
<td>Control variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintained course interest</td>
<td>.05 .02 .01</td>
<td>.18** .25** .04</td>
<td>.09** .01 .01</td>
</tr>
<tr>
<td>Interactions of students’ sociocultural position with the experimental manipulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feminine examples × students’ feminine gender identity</td>
<td>.26** .02</td>
<td>−.09 .06</td>
<td>−.01 .01</td>
</tr>
<tr>
<td>YouTube examples × students’ feminine gender identity</td>
<td>.01 .02</td>
<td>.06 .06</td>
<td>−.02 .01</td>
</tr>
<tr>
<td>YouTube examples × students’ immigrant background</td>
<td>−.08 .32</td>
<td>2.09* 1.04</td>
<td>−.05 .22</td>
</tr>
<tr>
<td>YouTube examples × parental cultural status</td>
<td>−.34* .17</td>
<td>−.09 .55</td>
<td>−.25* .12</td>
</tr>
</tbody>
</table>

Note: Correlation = zero-order correlation with column variable.
*p < .05. **p < .01 (two-tailed tests).
unveiled this negative association between parental cultural status and perceived relevance to be insignificant in the YouTube version of the video lecture. Hence, parental cultural status was only weakly associated with perceived relevance regardless of the examples’ medium.

The second significant interaction offered a more substantial confirmation of Hypothesis 6, as illustrated by Figure 2. With verbal-anecdotal examples, parental cultural status was positively associated with students’ scores on the multiple-choice questions about the video lecture (.27, \( p < .01 \)). When the same course materials were explained with YouTube clips, by contrast, an increase in parental cultural status only predicted an insignificant .02 increase in course achievement.

The third and final significant interaction—visualized in Figure 3—was in line with the fifth hypothesis. The course satisfaction of students with and without immigrant backgrounds did not differ if verbal-anecdotal examples were given. With YouTube examples, by contrast, students with immigrant backgrounds reported a significantly higher satisfaction with the video lecture (2.09, \( p < .05 \)). Finally, Hypothesis 4 was rejected: No significant interactions emerged between students’ gender and
the examples’ medium on either perceived relevance, course satisfaction, or achievement.

**DISCUSSION**

This study shows that students’ perceived relevance of an introductory sociology video lecture was not just a predictor of course satisfaction and achievement but was itself also dependent on students’ sociocultural position. A distinction was made between mechanisms underlying content- and medium-related course relevance. The former was expected to depend on the degree of fit between the video lecture’s content and students’ sociocultural position, whereas the latter—achieved by integrating the widely popular, low-threshold entertainment site YouTube into the video lecture—could make the course more accessible to disadvantaged students without harming the learning of advantaged students.

The data—collected among 1,325 undergraduates who viewed one of four experimental versions of an introductory sociology lecture—confirmed the first and second hypotheses. A positive link exists between students’ relevance perceptions and their course satisfaction as well as between that satisfaction and their achievement. As predicted by the third hypothesis, matching students’ gender with the example content hindered their relevance perceptions and thus their learning.

This finding seems to argue in favor of a diversified, culturally relevant curriculum that fits the gender positions of all students without excluding certain subgroups. Still, their gender does not exist in a vacuum but is embedded in a broader system of power relations. Of crucial importance is Brookfield’s (2007) contemporary take on Marcuse’s (1965) skepticism of attempts to diversify the curriculum. Put briefly, integrating minority perspectives into the classroom alongside mainstream ones may reinforce the status quo rather than questioning it because the minority ideas lose their radical character. This is, in Marcuse’s (1965) terms, an example of repressive tolerance. He claimed that the only way to avoid marginalizing dissenting perspectives would be to not associate them with dominant ones but to expose students solely to alternative views: “Unless the student learns to think in the opposite direction, he will be inclined to place the facts into the predominant framework of values” (p. 113). Such a radical minority program, however, seems less applicable to the current study’s outcomes: Students’ perceived course relevance, satisfaction, and achievement are directly pedagogical goals, which heighten their odds of succeeding academically as well as professionally. Marcuse (1965) does not refute the diversified curriculum’s effectiveness in achieving such goals but

![Figure 3. Interaction effect of students’ immigrant background and the course examples’ medium on course satisfaction.](image-url)
rather refers to the educational system’s broader goal of *e-ducation*: leading students away from what they already know by exposing them to new knowledge and ways of thinking (Masschelein and Simons 2012). E-ducational goals—such as furthering students’ critical thinking, engaging them in social action, or reducing their prejudices—might indeed be hindered by integrating minority perspectives into the dominant educational framework. This could also (partly) explain the current study’s unexpected finding that students’ perceived course relevance slightly decreased their achievement directly: Perhaps relevant content made the course more accessible—which increased their course satisfaction and their achievement—but also kept them within their comfort zone rather than challenging them to think critically, hence decreasing their achievement. Future studies could test not only this post hoc assumption but also the effects of a Marcusian radical minority curriculum on broader e-ducational outcomes.

In contrast to content-related relevance, no negative learning effects occurred of mismatching students’ sociocultural positions with the course examples’ medium. On the contrary, tentative evidence was found that the integration of YouTube examples—in addition of verbal-anecdotal examples—into the sociology video lecture functioned as an equalizing force. After all, it rendered insignificant the association between students’ parental cultural status and their course achievement. Moreover, it transformed the insignificant relationship between students’ immigrant background and their satisfaction with the video lecture into a positive one. This suggests that teachers could use YouTube examples to boost disadvantaged students’ learning. Still, the effects were small, only significant for two of the nine tested interactions, and no interplay was found between the impact of YouTube examples and students’ gender. Therefore, future research should determine whether these findings can be replicated in other sociology courses. It would also be interesting to test whether the educational use of other popular entertainment sites would yield similar results and whether capital-enhancing sites would indeed amplify, instead of reduce, sociocultural learning gaps.

Some more practical limitations are inherent to the study’s method. First, to ensure that differences in perceived course relevance could be attributed to the course examples’ content and medium, all other course elements were standardized. The obvious downside is that instead of being immersed in a normal, face-to-face lecture, all students watched a video guest lecture. As mentioned earlier, the found effects of YouTube course examples should thus be interpreted as the added value of YouTube to video-based lectures, making the study’s results especially relevant to teachers designing online sociology courses (MOOCs, distance learning, etc.). It remains to be seen whether similar effects would occur if YouTube were to be integrated into more traditional teaching situations. Perhaps students’ awareness of the lecturer’s physical presence makes them grasp the course relevance more easily, thus lessening the need for YouTube clips?

Of course, the effect of YouTube probably also depends on the class size: In large enrollment introductory sociology courses, students tend to adopt the role of passive onlookers seated in theater-style rooms, which might enhance their appreciation of the change of pace offered by YouTube examples. In smaller classrooms with more opportunities for active learning pedagogies and student-teacher interactions, the effect of entertaining YouTube intervals might be less strong.

Furthermore, the study assumed that the positive impact of using YouTube examples could be explained by the fact that these examples are taken from a popular entertainment medium, which relates the course to students’ own lives. Still, it remains possible that the YouTube effects did not—or at least not only—occur because of the medium’s link to students’ lives but simply because of its interruption of the lecturer’s monologue. Especially in large enrollment classes where students’ attention span might be limited, any teaching method that switches between lecturing and “something else” (i.e., using innovative media but also simply having a class discussion or perhaps just taking a break) might help them regain their focus.

To test this idea, one could conduct an experiment with one YouTube condition versus one condition of its interruption of the lecturer’s monologue. Especially in large enrollment classes where students’ attention span might be limited, any teaching method that switches between lecturing and “something else” (i.e., using innovative media but also simply having a class discussion or perhaps just taking a break) might help them regain their focus.

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In addition, the chosen video lecture topic—abstract Durkheimian concepts, such as social facts and mechanical/organic solidarity—might have strengthened the course’s match with advantaged students’ personal interests. Lectures centered around sociological concepts like stratification and privilege might resonate more closely with the lived experiences of disadvantaged students while at the same time challenging advantaged students’ meritocratic ideologies. This could be tested by replicating the experiment with a video lecture on, for instance, Marxist sociology.
A further limitation lies in the experiment’s short duration of just one 50-minute lecture. Stronger learning effects might occur if the experiment were to span the whole course. Achievement could then also be measured more generally by analyzing students’ exam results. Such long-term experiments, however, raise ethical concerns about the use of students’ exams as data and the extended exposure of student subgroups to suboptimal teaching techniques.

Finally, three experimental conditions could be added. The first is a pure control condition without examples, to test Frymier and Houser’s (1998) claim that all course examples increase relevance. The opposite is possible: Perhaps wrong examples first trigger students’ attention, after which they are evaluated as irrelevant, leading to a more negative experience. The second additional condition would mix up the example content (e.g., by giving masculine and feminine examples). This in-between condition might be generally liked because most students have something to relate to or disliked because half of the examples are less relevant. A final condition would compare this study’s passive use of YouTube examples with an active approach (e.g., asking students to shoot their own videos). This may stimulate the sociological imagination even more but also makes the course more challenging, perhaps hindering disadvantaged students’ learning (Eisen 2012).

Despite its limitations, the study’s unique contribution lies in its successful manipulation of course relevance. To achieve this, one should (1) consider the fit between course and student characteristics and (2) disentangle content- and medium-related relevance. These nuances matter and not just because of their indirect link with student achievement. Perceived relevance also directly predicts students’ course satisfaction, which Lo (2010) found to be positively associated with their expectations of the course grades they will receive. Such perceived academic success might in turn influence broader measures like students’ self-esteem and academic ambition. Lo (2010:48) argued that “strong student satisfaction implies that appropriately challenging instructional methods are serving to trigger students’ thinking and learning.” Those instructional methods are inevitably—though often subtly—socioculturally situated. Recognizing this might encourage instructors to teach in a more conscious, self-critical manner.

APPENDIX

A. FACTOR LOADINGS AND ITEM MEANS FOR COURSE SATISFACTION

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now that you’ve attended the guest lecture, how well would you say that you can do the following things?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Staying focused during this lecture</td>
<td>.71</td>
<td>2.07</td>
<td>.86</td>
</tr>
<tr>
<td>2. Memorizing the lecture matter and recalling it when necessary (e.g., on an exam)</td>
<td>.66</td>
<td>2.04</td>
<td>.73</td>
</tr>
<tr>
<td>3. Applying the lecture matter to situations in my own life</td>
<td>.47</td>
<td>2.27</td>
<td>.78</td>
</tr>
<tr>
<td>4. Discriminating between important and less important elements of this lecture</td>
<td>.43</td>
<td>2.51</td>
<td>.78</td>
</tr>
<tr>
<td>5. Understanding the lecture matter</td>
<td>.63</td>
<td>2.58</td>
<td>.75</td>
</tr>
<tr>
<td>6. Making notes which emphasize, clarify and relate key facts of the lecture</td>
<td>.56</td>
<td>2.16</td>
<td>.75</td>
</tr>
<tr>
<td>7. Explaining the lecture matter clearly to others</td>
<td>.61</td>
<td>2.01</td>
<td>.75</td>
</tr>
<tr>
<td>Below are another few questions about today’s guest lecture, with two adjectives at the ends.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. How did you feel today during the viewing of the guest lecture? (uncomfortable–comfortable)</td>
<td>.39</td>
<td>3.11</td>
<td>.91</td>
</tr>
<tr>
<td>9. What kind of atmosphere did the instructor create today during the lecture? (relaxed–tense)</td>
<td>1.89</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>10. How was the instructor’s attitude during this lecture? (loose–tight)</td>
<td>1.98</td>
<td>.75</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
<th>M*</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. How did the instructor behave when giving examples to</td>
<td>2.00</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>clarify the lecture? (serious–with humor)?</td>
<td>−.63</td>
<td>2.54</td>
<td>.94</td>
</tr>
<tr>
<td>12. What did you think of the instructor’s teaching method</td>
<td>−.70</td>
<td>3.17</td>
<td>1.09</td>
</tr>
<tr>
<td>today? (fascinating–boring)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. The sociology lecture was interesting today</td>
<td>.78</td>
<td>2.94</td>
<td>1.00</td>
</tr>
<tr>
<td>14. Today’s lecture did not really grab my attention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. This lecture stimulated my interest in Durkheim’s ideas</td>
<td>.54</td>
<td>2.77</td>
<td>.95</td>
</tr>
<tr>
<td>16. The lecture was so interesting today, that it was easy to keep</td>
<td>.78</td>
<td>2.43</td>
<td>.96</td>
</tr>
<tr>
<td>paying attention</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items 1 through 7 were measured with a scale of 0 (very hard for me) to 4 (very easy for me), Items 8 through 12 with a 4-point semantic differential (adjectives at scale ends), and Items 13 through 16 with a scale of 0 (disagree strongly) to 5 (agree strongly).

These three items were dropped as they did not load on the course satisfaction factor.

B. MEASUREMENT OF COURSE ACHIEVEMENT

1) Jan owns a café. He makes the coffee himself, but also offers his customers delicious cheesecake which he buys from the bakery around the corner. One day, that bakery suddenly decides to stop making the cheesecake, leaving Jan with disappointed customers. With Durkheim, one could above all see this situation as:

- □ a lack of mechanical solidarity / □ an illustration of a social fact / □ a lack of organic solidarity / □ an illustration of egoism

2) Which of the four phenomena given below would Durkheim not call a “social fact”?

- □ speaking a language / □ stopping when the traffic light goes red / □ celebrating someone’s birthday / □ dying

3) Besides transferring knowledge, higher education also brings together young adults of similar ages, which leads to friendships and relationships. This is an example of:

- □ a manifest function / □ a latent function / □ a latent dysfunction / □ a manifest dysfunction

4) According to Durkheim, mechanical solidarity above all occurs in societies with a lot of:

- □ social facts / □ uniformity / □ division of labor / □ individualism

5) A student stays awake studying until 6 AM on the day before the exam. Why could one call this a “social fact”? Check what does not apply.

- □ Because the student consciously chooses to study so intensely / □ Because the student will get bad grades if he/she does not study / □ Because the exam will take place, regardless of whether the student has studied or not / □ Because the student’s family cares greatly about him/her getting good grades

6) Several thousand fans sing along with their band during a concert. This illustrates the idea of:

- □ organic solidarity / □ a latent dysfunction of the concert / □ mechanical solidarity / □ a manifest dysfunction of the concert

EDITOR’S NOTE

Reviewers of this manuscript were, in alphabetical order, Lester Andrist, Jay Howard, and Yvonne Luna.

ACKNOWLEDGMENTS

I warmly thank the students and lecturers who participated in the experiment as well as other university staff who assisted in its practical organization. Moreover, I am grateful to Dr. Mark Elchardus—the guest lecturer—for
his time spent memorizing and recording the video lecture and to the camera crew for their help in creating the final product. Finally, I appreciate the productive discussions with my (co-)supervisors, colleagues, and partner as well as the reviewers’ constructive criticism.

NOTES
1. This argument is partly based on Belet (forthcoming).
2. Teaching assistants were briefed about this remark, yet in one class the assistant said that exam-related content would be repeated later. Student remarks during a post-experiment focus group indicated the negative side effects of this different introduction, such as students leaving or chatting during the lecture. To safeguard the comparison of the experimental conditions, the group was dropped from the analyses. N = 1,325 is the remaining sample.

FUNDING
The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was funded by the Research Foundation–Flanders (FWO) under grant number N1N3116N. This sponsor did not have any role in the study design; the collection, analysis, and interpretation of the data; the writing of the report; or the decision to publish the article.

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