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Searching for Data Ethics Courses

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Dane Christian Joseph

ANYONE WHO HAS EVER HAD to convert learning outcomes data into information that educational decision makers can use to improve instructional practices can attest that it is anything but simple. Institutions are highly accountable for demonstrating that student learning outcomes are being met in classrooms (Banta and Palomba 2015; Suskie 2015). Analyzing the data often requires the sort of technical and methodological expertise possessed by measurement, evaluation, and institutional research personnel,

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and graduate programs within these fields are rapidly growing to meet the needs of higher education institutions, state education departments, and private testing organizations.

Providing methodological assessment services comes with ethical challenges to ensure that data are accessed, used, shared, and managed in a professional and legal manner. Data ethics involve much more than applying to the institutional review board (IRB) or receiving Family Educational Rights and Privacy Act (FERPA) training. IRB and FERPA are extremely important and go a long way toward enhancing ethical practice in educational assessment—including methodological professionalism, honesty, integrity, transparency,

and respect for student data. But this is just a piece of the puzzle on creating a culture of ethics within higher education, and many other factors must be considered (Gallant, Beesemyer, and Kezar 2009).

From the author's experiences in providing methodological assessment services, it appears that many novice assessment personnel cannot articulate why data ethics matter. As an example, it seems that methodologists typically understand why severe violations of the normality assumption require adapting

the analytical strategy. One could opt to use nonparametric approaches or transform data through appropriate means so that the results represent reality. However, the prospect of connecting the methodological understanding with the ethical reasons for doing so seems bleak. Is transforming data justified under all conditions of normality violations? And what if a transformation doesn't work; should there be persistent hammering of keystrokes until it does?

Exploring data ethics education is important because poor data ethics practices potentially (1) lead to sanctions for institutions that fail to store or report student data with confidentiality; (2) waste valuable assessment resources for researchers who fail to

properly conceptualize and operationalize measures; and/or (3) provide misguided feedback to instructors on their teaching practices, thus stagnating the learning process at the student level. This study explored whether data ethics (or similar) courses existed within graduate assessment, evaluation, and methodology programs.

What Forms of Data Ethics Learning Opportunities Exist?

Codes of ethics are available to educational assessment personnel through professional associations such as the Association of Institutional Research (AIR), the Association for the Assessment of Learning in Higher Education (AALHE), the American Educational Research Association (AERA), the American Evaluation Association (AEA), and the American Psychological Association (APA). An association's website will typically list ethical codes that should govern professional behaviors and practices. But several scholars warn that ethics codes are often used as justification by those who purposefully cheat the system or unintentionally fail to acknowledge it (Transparency International 2013). Codes are also difficult to decipher in some practical or unique situations. So for novice professionals, a lack of guided instruction by an expert might leave interpretation to individual whim.

Guided instruction is far more advantageous than unguided approaches, and research seems to suggest that the

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advantage is greatest when learners do not possess sufficiently high prior knowledge to provide “internal” guidance (Kirschner, Sweller, and Clark 2006). For novice or aspiring assessment professionals such as graduate students, formal coursework in ethical reasoning is an opportunity to facilitate deep learning about data ethics and ethical codes of conduct. In the classroom, guided instruction can be facilitated by formal learning activities where learners are paired with an expert—such as a professor—who sets learning goals and outcomes consistent with ethics curricula. Activities can be assigned that target

each level of Bloom’s taxonomy, from knowledge of ethical theories to application and critique of ethical reasoning with real or simulated assessment data.

A good example of a data ethics course curriculum comes from the National Center for Education Statistics *Forum Guide to Data Ethics* online course (2010). Although an excellent resource, the external nature of the course lacks a formal community for learning where the principles, problems, and solutions that are unique to participants can be shared. Given that today’s digital world establishes communities for learning in nonphysical

spaces as a reality, the focus of guided instruction need not be considered in the strictest face-to-face sense.

Empirical Results of Data Ethics Coursework in Methodological Programs

Education is a vital catalyst for change. As many assessment professionals arguably attained a graduate degree or certificate in an assessment-relevant field, and aspiring ones may hope to do so, I examined the status of data ethics coursework within several graduate programs, including those conferring a certificate. Because my concerns were primarily with those assessment personnel who attain explicit technical and methodological training to work with educational data, I limited

the programs studied to those in educational assessment, educational program evaluation, educational measurement or statistics, and higher education institutional research.

A convenience sample of these program listings was generated using the AIR, AEA, and APA websites and listed in an SPSS v.22.0 spreadsheet. Any duplicates across association listings of programs were deleted, as well as program records that were either discontinued or lacking sufficient course title/description information on their websites. If a program listing focused on public health evaluation methodology, this listing was excluded from the data set since the conjunction for education *and* methodology could be true only if both are true; public health would not fit the “higher education” criterion as conceived here. If a program focused on educational policy studies but did not include an explicit assessment, measurement, evaluation, or research cognate, this listing also was excluded—regardless of whether students were required to take an introduction to quantitative methods course.

Once the final program listing was completed, I searched the programs’ online course catalogs. The search targeted catalog-listed core and elective course titles and course descriptions that contained ethics or ethics-related keywords such as *moral*, *justice*, and *fairness* for both substantive and methodological courses. Keywords for *human subjects/participants research*, *FERPA*, and *IRB* were also included, since these can be found in methodology courses and include a meaningful discussion of data ethics issues centered on protecting student data. Courses without online syllabi were not examined. A cross-tab of degree/certificate level and presence of ethical keywords is presented in Table 1.

Results indicate that although formal ethics coursework is present in three out of five programs, certificate

and doctoral programs have more ethics course representation than masters programs. Even for the programs where ethics curricula are present, the question remains whether the emphasis is sufficient. Limitations to the conclusions include (1) because association listings use information provided voluntarily by institutions, not all existing graduate assessment programs (or certificates) may have been found and therefore included in the analysis; (2) among those found, not all were included since several had missing course catalog information for degree course name/description; (3) it is possible that students take graduate data ethics courses either through professional development courses or courses not listed in the program catalogue (for

example, special topics courses with a general description, or the NCES online course); (4) although not explicitly stated in course titles or descriptions, some courses—for example, survey or introductory courses—may well have included an engaging ethics component or data ethics as a student learning outcome.

Perhaps the greatest limitation to this exploratory study was the program inclusion criteria utilized. Assessment professionals come from varied backgrounds, including higher education administration, student affairs, and business administration, as well as educational or school psychology programs that may not include measurement-affiliated cognates. Although these programs tend to be more

Table 1. Type of Program × Is There a Data Ethics Component Present Cross-Tabulation

			Is There a Data Ethics Component Present?		
			No	Yes	Total
Type of Program	Certificate	Count	10	16	26
		% Type of program	38.5	61.5	100.0
		% Total of all programs	13.3	21.3	34.7
	Masters	Count	12	14	26
		% Type of program	46.2	53.8	100.0
		% Total of all programs	16.0	18.7	34.7
	Doctoral	Count	7	16	23
		% Type of program	30.4	69.6	100.0
		% Total of all programs	9.3	21.3	30.7
Total	Count	29	46	75	
	% Type of program	38.7	61.3	100.0	
	% Total of all programs	38.7	61.3	100.0	

substantively than methodologically focused, individuals pursuing such degree types but working in higher education assessment are just as embedded in data analysis as those with technical measurement degrees, often learning on the job.

Conclusion

So where do we go from here? The absence of explicit data ethics content in some graduate measurement programs warrants attention by the assessment curriculum field. Even where ethics keywords were identified, it is not necessarily the case that they were connected to data analytic and methodological practices. For while the ability to ask the right assessment questions, find novel solutions, and report on them is tantamount to assessment *for* learning's purpose, it does the profession no good to be methodologically proactive with data but reactive to data misconduct and misreporting.

Future data ethics curriculum studies should survey actual course instructor practices as well as analyze syllabus content. Ethically sound assessment demonstrates institutional respect for

stakeholders as it promotes honesty between the parties; promotes justice by being beneficent and mindful of taxpayers' and students' financial investments; and transfers some power back into the hands of tuition payers so that they can make the best decision for achieving their educational and personal goals.

"Curiosity does not always kill the cat," and it may very well be that when educational assessment specialists (novice or expert) encounter data ethical issues, they take the opportunity to explore, process, and reflect on them. While one can at least hope, it's better that we not leave this to chance. Keeping in mind that what is available is not always what is taught or learned, let's make the NCES data ethics curriculum more visible in formal coursework.

References

Banta, T., and C. A. Palomba. 2015. *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*, 2nd ed. San Francisco: Jossey-Bass.

Gallant, T. B., L. A. Beesmyer, and A. Kezar. 2009. "Creating a Culture of Ethics in Higher Education." In J. Knapp and D. J. Siegel (Eds.), *The Business of*

Higher Education (pp. 199–226). Santa Barbara, CA: Praeger/ABC-CLIO.

Kirschner, P., J. Sweller., and R. Clark. 2006. "Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching." *Educational Psychologist* 41 (2): 75–86.

National Center for Education Statistics. 2010. *Forum Guide to Data Ethics (NFES 2010-801)*. US Department of Education. Washington, DC: National Center for Education Statistics.

Suskie, L. 2015. *Five Dimensions of Quality: A Common Sense Guide to Accreditation and Accountability*. Hoboken, NJ: Wiley.

Transparency International. 2013. *Global Corruption Report: Education*. New York: Routledge.

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