

Scientific Writing

Writing High Impact Papers

Module 2

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Outline



Module 1: Literary Genre

Module 2: Structure 1: Abstract

Module 3: Structure 2: Introduction

Module 4: Structure 3: Results and Discussion, Conclusion

Module 5: Style, Language 1: Complexity Problems 1

Module 6: Language 2: Complexity Problems 2, Rhythm

Module 7: Language 3: Plain English and Topic Sentences

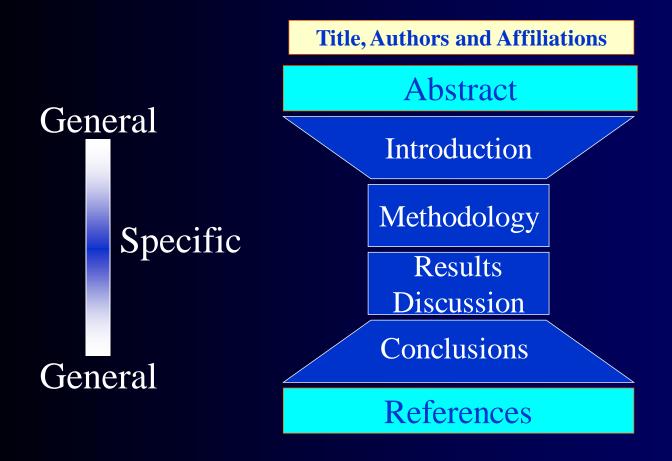
Module 8: Manuscript Submission, The Editorial Process



Module 2

Organization of a paper





Adapted from: Hill et al., Teaching ESL students to read and write experimental papers, TESOL Quarterly, 16: 333, 1982:





An abstract summarizes the major aspects of the paper

The abstract contains only text



- -A good, well-written abstract allows the reader to quickly identify the major contributions of the paper to the area.
- -Remember that many readers only have access to title and abstract



For Education, Law, Geo, His, Mus, Social Areas

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Contextualization

Gap

Purpose

Methodology

Results

Conclusions



Student teachers consider cooperating teachers to be one of the most important contributors to their teacher preparation program. Therefore, the ways in which cooperating teachers participate in teacher education are significant. This review seeks to move conceptions of that participation beyond commonly held beliefs to empirically supported claims. The analysis draws on Brodie, Cowling, and Nissen's notion of categories of participation to generate 11 different ways that cooperating teachers participate in teacher education: as Providers of Feedback, Gatekeepers of the Profession, Modelers of Practice, Supporters of Reflection, Gleaners of Knowledge, Purveyors of Context, Conveners of Relation, Agents of Socialization, Advocates of the Practical, Abiders of Change, and Teachers of Children. When set against Gaventa's typology of participation, the resultant grid highlights the importance of negotiated or invited spaces for cooperating teacher participation and provides a new way of thinking about, planning professional development for, and working with cooperating teachers.

REVIEW OF EDUCATIONAL RESEARCH, 84 (2), 163-202, 2014



- 1. Context: Student teachers consider cooperating teachers to be one of the most important contributors to their teacher preparation program.
- 2. Gap: Therefore, the ways in which cooperating teachers participate in teacher education are significant.
- 3. Propose: This review seeks to move conceptions of that participation beyond commonly held beliefs to empirically supported claims.
- 4. Methods: The analysis draws on Brodie, Cowling, and Nissen's notion of categories of participation to generate 11 different ways that cooperating teachers participate in teacher education: as Providers of Feedback, Gatekeepers of the Profession, Modelers of Practice, Supporters of Reflection, Gleaners of Knowledge, Purveyors of Context, Conveners of Relation, Agents of Socialization, Advocates of the Practical, Abiders of Change, and Teachers of Children.
- 5. Results: When set against Gaventa's typology of participation, the resultant grid highlights the importance of negotiated or invited spaces for cooperating teacher participation and provides a new way of thinking about, planning professional development for, and working with cooperating teachers.
- 6. Conclusion:

REVIEW OF EDUCATIONAL RESEARCH, 84 (2), 163-202, 2014



Traditionally, average causal effects from multiple-baseline data are estimated by aggregating individual causal effect estimates obtained through within-series comparisons of treatment phase trajectories to baseline extrapolations. Concern that these estimates may be biased due to event effects, such as history and maturation, motivates our proposal of a between-series estimator that contrasts participants in the treatment to those in the baseline phase. Accuracy of the new method was assessed and compared in a series of simulation studies where participants were randomly assigned to intervention start points. The within-series estimator was found to have greater power to detect treatment effects but also to be biased due to event effects, leading to faulty causal inferences. The between-series estimator remained unbiased and controlled the Type I error rate independent of event effects. Because the between-series estimator is unbiased under different assumptions, the 2 estimates complement each other, and the difference between them can be used to detect inaccuracies in the modeling assumptions. The power to detect inaccuracies associated with event effects was found to depend on the size and type of event effect. We empirically illustrate the methods using a real data set and then discuss implications for researchers planning multiple-baseline studies.

PSYCHOLOGICAL METHODS, 19 (4), 493-510, 2014



Legal cases are won or lost on the basis of statistical discrimination measures, but workers' perceptions of discriminatory behavior are important for understanding labor supply decisions. Workers who believe that they have been discriminated against are more likely to leave their employers, and workers' perceptions of discrimination likely drive formal complaints to the Equal Employment Opportunity Commission. Yet the relationship between statistical and self-assessed measures of discrimination is far from obvious. We expand on the previous literature by using data from the After the J.D. study to compare standard Blinder-Oaxaca measures of earnings discrimination to self-reported measures of client discrimination, other work-related discrimination, and harassment. Our results indicate that conventional measures of earnings discrimination are not closely linked to the racial and gender bias that new lawyers believe they have experienced on the job. Moreover, statistical earnings discrimination does not explain the disparity in self-assessed bias across gender and racial groups.

JOURNAL OF LEGAL STUDIES, 43 (2), 323-357, 2014



Research on intergenerational economic mobility often ignores the geographic context of childhood, including neighborhood quality and local purchasing power. We hypothesize that individual variation in intergenerational mobility is partly attributable to regional and neighborhood conditionsmost notably access to high-quality schools. Using restricted Panel Study of Income Dynamics and census data, we find that neighborhood income has roughly half the effect on future earnings as parental income. We estimate that lifetime household income would be \$635,000 dollars higher if people born into a bottom-quartile neighborhood would have been raised in a top-quartile neighborhood. When incomes are adjusted to regional purchasing power, these effects become even larger. The neighborhood effect is two-thirds as large as the parental income effect, and the lifetime earnings difference increases to \$910,000. We test the robustness of these findings to various assumptions and alternative models, and replicate the basic results using aggregated metropolitan-level statistics of intergenerational income elasticities based on millions of Internal Revenue Service records.

ECONOMIC GEOGRAPHY, 91, (1), 83-106, 2015



This article examines the diffusion of evaporation technology along multi-centred and overlapping scientific, industrial, and commercial knowledge networks. It follows the circulation of vacuum pan (steam evaporator) technology in the Greater Caribbean, the North Atlantic, and the East Indies in order to understand the dual processes of invention and globalization. The article demonstrates that the tropical sugar plantation served as an experimental laboratory and, as such, vital inventions and engineering developments that took place in this space were subsequently incorporated into manufacturing designs in the North Atlantic, helping to modernize European industries in the process. As transient intermediaries, scientists, industrialists, and engineers modified and adapted vacuum pan technologies to meet the local demands of planters in the Greater Caribbean, thereby integrating this area into an increasingly globalized economy.

JOURNAL OF GLOBAL HISTORY, 9, (1), 1-25, 2014



This paper tests two competing explanations of differences in returns to cultural capital across schooling environments: Cultural reproduction (cultural capital yields a higher returns in high-achieving environments than in low-achieving ones) and cultural mobility (cultural capital yields higher returns in low-achieving environments). Using multilevel mixture models, empirical results from analyses based on PISA data from three countries (Canada, Germany, and Sweden) show that returns to cultural capital tend to be higher in low-achieving schooling environments than in high-achieving ones. These results principally support the cultural mobility explanation and suggest that research should pay explicit attention to the institutional contexts in which cultural capital is converted into educational success.

SOCIAL SCIENCE RESEARCH, 50, 177-188, 2015



Multi-disciplinary studies of consumption have proliferated in the last two decades. Heavily influenced by notions of the consumer' and tenets of the cultural turn', explanations have relied preponderantly upon models of voluntary action contextualised by webs of cultural meanings which constitute symbolic resources for individual choice. Arguably, the cultural turn has run its course and is beginning to unwind, a consequence of internal inconsistencies, misplaced emphases and the cycle of generational succession in theory development in the social sciences. Theories of practice provide a competing alternative approach which contests the colonisation of consumption by models of individual choice and cultural expressivism. To that end, this article explores the use of theories of practice as a lens to magnify aspects of common social processes which generate observable patterns of consumption. It is suggested that theories of practice might provide a general analytic framework for understanding consumption, one whose particular emphases capture important and relevant aspects overlooked by previously dominant approaches to consumption as culture. This article reviews reasons for the emergence of theories of practice and isolates some of their distinctive emphases. Strengths and weaknesses of the theory of practice as an approach to consumption are discussed.

JOURNAL OF CONSUMER CULTURE, 14 (3), 279-303, 2014



This article provides a conceptual overview of a self-determination theory approach to motivation in music education. Research on motivation in music learning is active and has influenced the field considerably, but it remains theoretically patchy, with a vast array of theoretical perspectives that are relatively disconnected. Reflecting motivation research more generally, music education still lacks a parsimonious, unified theoretical approach to motivation. Self-determination theory offers a way to address this issue, because it is a broad theory of motivation that examines the nature and sources of motivational quality. This article describes two key components of self-determination theory. First, the tendency towards personal growth and a more unified sense of self is supported through the fulfilment of the basic psychological needs of competence, relatedness, and autonomy. Second, behaviour is more enjoyable and contributes more to personal wellbeing when motivation is internalized and more closely aligned with the self. These two features of self-determination theory are related, such that motivation is internalized to the extent that basic psychological needs are fulfilled. These processes are supported by recent self-determination theory research in music education. Previous research on motivation from other theoretical perspectives also lends support to the self-determination theory approach. The approach therefore provides a means of theoretically unifying previous research. An integrated model is presented as the basis for future research on motivation for music learning in the context of psychological wellbeing more broadly.

MUSICAE SCIENTIAE, 19 (1), 65-83, 2015

Assignments



- 1. Identify the five Top Journals in your research area
- 2. Select at least 10 abstracts and Introduction sections from good papers from these journals
- 3. Categorize all sentences in these abstracts based upon the proposed models

Sources



Source: Michael Alley *The Craft of Scientific Writing*, 3rd edition (Springer-Verlag, 1996).

Hill et al., Teaching ESL students to read and write experimental papers, TESOL Quarterly, 16: 333, 1982:

Aluísio, S.M. (1995). Ferramentas para Auxiliar a Escrita de Artigos Científicos em Inglês como Língua Estrangeira. **Tese de Doutorado**, IFSC-USP, 228 p.

Grzybowski et al., Nature Materials 2, 241–245 (2003)

Yang et al, Langmuir; 2004; 20; 5978

Lee et al., Nature Biotechnology 23, 1517, 2005 (Review)

Centurion et al., J. Nanosc. Nanotech, 2011 in press

Glowacki et al., Nature Chem., 3, 850, 2011

IEEE Signal Processing Magazine, 2005, p 55

Borges et al., International Journal of Information Technology & Decision Making, 9, 2010, 547.

International Journal of Plasticity 27 (2011) 1165

Urselmann, et al., IEEE Transactions on Evolutionary Computation, 15, 2011, 659

Evans et al., ACS Nano, In Press

Juan et al., Analytical Chem, In Press

Butcher et al., Human–Computer Interaction, 26, 2011,123.

International Journal of Electronics, 97, 2010, 1163

Nature Materials 2, 552-558, 2003

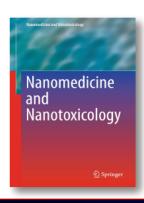
Hoover et al., J. Am. Chem. Soc. 133, 16901, 2011



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Nanomedicine and Nanotoxicology

Series Ed.: Zucolotto, Valtencir

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Thank You



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