Nicholas Rowe

# Academic & Scientific Poster Presentation

## A Modern Comprehensive Guide

Springer

# Contents


1 **Introduction** ..... 1
Conferences and Poster Presentation ..... 2
Evolution of the Academic/Scientific Poster ..... 3
Poster Compilation ..... 5
The Current Situation ..... 6
References ..... 7

2 **Poster Presentations: Objectives, Functions, and Issues** ..... 9
What an Academic/Scientific Poster Is and Is Not ..... 10
How a Poster Presentation Works ..... 11
Knowledge Dissemination and Networking ..... 12
Charting Poster Presentation Through Published Literature ..... 14
Issues with Current Poster Practice ..... 15
The "Paradox of Choice" ..... 15
Perceptions of Quality ..... 15
Poster Quality ..... 15
Academic/Scientific Quality ..... 16
Return for Investment ..... 16
Preparation ..... 17
Cost of Materials ..... 17
Conference Fee ..... 17
Other Expenses ..... 17
References ..... 19

3 **Knowledge Transfer in the Conference Setting** ..... 21
Linear Communication ..... 22
Oral and Unsupported Poster Presentations ..... 22
Interaction ..... 23
Transactional Exchange ..... 24
General Discourse and Conversation ..... 25
Workshops and Focus Groups ..... 25
Supported Poster Presentations ..... 26

Balancing Your Objectives ..... 27
References ..... 29

**4 Preparation and Planning** ..... 31
Selecting Your Conference ..... 32
Benefit vs. Cost ..... 33
Should I Present? ..... 34
"Selling" Your Ideas: What, Who to, How, and When ..... 36
Using a Presentation to "Advertise" Yourself and Your Work ..... 36
Oral Presentation ..... 37
Poster Presentation ..... 37
Establishing and Meeting Your Goals ..... 42
Caveat Emptor ..... 42
References ..... 43

**5 Reconsidering Poster Presentation as a Combined Practice** ..... 45
Are Posters Just a Visual Medium? ..... 45
The Importance of Text in Posters and Poster Abstracts ..... 47
The Drawback of Text in Posters: Reading Rate and Capacity ..... 48
Posters as an Educational Medium ..... 50
Considering Alternative Intentions for Poster Presentation ..... 51
Posters as an Advertising Medium ..... 51
Posters as a Socializing Medium ..... 52
What Do We Want from Posters? ..... 54
References ..... 58

**6 Poster Design and the Viewer Perspective** ..... 61
Poster Design and Compilation ..... 62
Software Platforms for Traditional and Electronic Posters ..... 62
How to Set Up PowerPoint for Traditional and Electronic Posters ..... 63
Traditional Poster Sizes ..... 66
Electronic Poster Format ..... 67
Differences in Traditional and Electronic Poster Compilation ..... 68
Traditional Poster Presentations ..... 68
Electronic Poster Presentations ..... 69
Dividing Your Topic ..... 70
Designing for Impact ..... 71
Stand Out or Blend In? The Pros and Cons of Being "Different" ..... 72
Conference Fatigue and How Viewers Perceive Our Posters ..... 72
Using Thin-Slice Theory to Rationalize Poster Design "Tips" ..... 75
Passersby Are Probably Not Ignoring You ..... 75
References ..... 76

**7 Visual and Textual Elements: How We See Posters** ..... 79
Posters Seen as a Collective Exhibit ..... 79
The Place of Visual Literacy and Visual Competence ..... 80
Posters Seen as Individual Works ..... 81
Text ..... 81

The Viewer's Perspective ..... 83
References ..... 86

**8 Presenting Information: Images, Facts, and Data** ..... 87
Using Images to Emote, Inform, and Depict ..... 89
Images for Traditional and On-Screen Use ..... 91
Converting Slides to High-Resolution Images ..... 92
Copyright and the Use of Images ..... 93
Screenshots ..... 93
Non-digital Image Use ..... 94
Tables, Graphs, and Other Ways to Represent Data: The Good and the Bad of Data Visualization ..... 94
Tables (Table 8.2) ..... 94
Graphs ..... 95
Infographics ..... 96
References ..... 98

**9 Themes, Color, Tone, and Aesthetics** ..... 99
Why We "Like" What We "Like": Visual Culture ..... 99
Aesthetics in Poster Compilation ..... 100
Translating Color ..... 100
References ..... 105

**10 Evaluating Academic/Scientific Posters** ..... 107
Limitations of Assessment ..... 107
Capacity ..... 108
Abstract Assessment ..... 109
Poster Assessment ..... 110
Poster Rubrics ..... 111
Initial Impressions ..... 111
Mechanics ..... 111
Content ..... 112
Overall Function ..... 113
Possible Ways to Improve Poster Assessment ..... 113
Extended Abstract Assessment ..... 114
Transparent Poster Assessment ..... 114
Mutual Benefit ..... 115
References ..... 115

**11 Providing Supplementary Information** ..... 117
Extended Text ..... 117
Links and Sources ..... 118
QR Coding ..... 118
Podcasts and Video ..... 119
Individual Material ..... 119
References ..... 121

**12 Delivering Your Poster Presentation** ..... 123
The Venue and Poster Events ..... 123
Preparation for Professional Interaction and Networking ..... 124
Posters as a "Junior" Activity ..... 124
"Flash Talks" and "Elevator Pitches" ..... 125
On the Day ..... 125
Before the Session ..... 125
Someone's Coming ..... 128
At the End of the Day ..... 129
References ..... 130

**13 Thinking Toward the Future** ..... 131
Why Bother with Conferences and Posters? ..... 131
The Value of Conferences and Presentation ..... 134
Motivation and Need ..... 135
Conference Organization ..... 135
Learning from the Past ..... 136
Points for Consideration ..... 138
References ..... 139

**Appendix 1 Checklist for Academic/Scientific Poster Compilation** ..... 141

**Appendix 2 Checklist for Academic/Scientific Poster Assessment** ..... 145

**Appendix 3 Checklist for Institutional Funding** ..... 149

**Key Poster Bibliography [Chronological]** ..... 153

**References** ..... 163

# List of Figures


Fig. 1.1 The birth and origin of the pope. Woodcut by Lucas Cranach, 1545 ..... 4
Fig. 1.2 An early example of a trifold display – 1946 ..... 5

Fig. 2.1 Visual engagement at poster viewing sessions: the key to initiating dialogue ..... 12

Fig. 3.1 The linear communication of oral and unsupported poster presentations at conferences ..... 22
Fig. 3.2 Transactional communication (Image reproduced courtesy of the National Communication Association – Washington D.C. [All rights reserved]) ..... 24
Fig. 3.3 Transactional communication in supported poster presentations at conferences ..... 26

Fig. 4.1 Conference attendees' hierarchy of needs (Olbrantz 2012: image reproduced courtesy of the Omnipress Big Ideas Blog) ..... 32
Fig. 4.2 Flowchart for planning conference attendance ..... 41

Fig. 5.1 The needs of parties involved in poster sessions ..... 54

Fig. 6.1 Horizontal format posters ..... 64
Fig. 6.2 Vertical format posters ..... 65
Fig. 6.3 Setting the page size for PowerPoint posters ..... 67

Fig. 7.1 The "story" poster layout ..... 85
Fig. 7.2 The "core" poster layout ..... 85

Fig. 8.1 The origin of species as a poster (Image kindly reproduced courtesy of Spineless Classics 2016) ..... 88
Fig. 8.2 Charts and graphs ..... 96
Fig. 8.3 Data visualization tools ..... 97
Fig. 8.4 Poster layout ..... 97

Fig. 9.1 Color and its associations (After Kanner 2005) ..... 102
Fig. 9.2 Tint, tone, and shade (Image courtesy of Jacobolus – Own work, Public Domain, https://commons.wikimedia.org/w/index.php?curid=9070871) ... 102
Fig. 9.3 Lighter poster layouts ..... 104
Fig. 10.1 Sequence of poster assessment ..... 112
Fig. 11.1 QR code example ..... 118
Fig. 12.1 Proxemics in poster presentation ..... 127
Fig. 13.1 Published data return trends for "poster presentation" 1980–2016 ..... 133
Fig. 13.2 Proportions of poster vs. oral presentations at small, medium, and large conferences ..... 134