

Using Infographics for Engaging Visual Communication

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This article is based on a workshop delivered as part of the ALLA 2016 conference.

Introduction

Technology seems to be constantly evolving at a rapid rate. This poses the challenge of developing one's knowledge and skills at an equivalent pace, because with all this new technology comes many new and exciting opportunities. Accordingly, it is imperative for information professionals and educators to stay abreast of these technological developments, and to trial their use to improve the learning experiences of library patrons. Infographics are a prime example of how a new presentation format can be utilised for a variety of information dissemination purposes.

Infographics have been defined as “a visualisation of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood.”² Krauss has explained that, because infographics utilise both text and images, they sit at the optimum point where linguistic and non-linguistic systems merge.³ The well-known expression ‘a picture is worth a thousand words’ describes the idea of infographics perfectly – sometimes “pictures can be essential when complexity demands more than words can say”⁴ An example infographic designed

by the author is provided below. This image demonstrates how plain text can be converted into an eye-catching visual format, which ensures the content is more easily absorbed by the audience.

The Benefits of Infographics

There are many reasons why librarians and information professionals should experiment with infographics as a communication tool. Because infographics are visual, they are easier for the brain to process.⁵ Visual learners constitute about 65% of the population, and so matching a communication style to this learning style can lead to enhanced understanding and retention among these individuals.⁶ Research has shown that people generally remember only 10-20% of what they hear and read, but around 80% of what they see and do.⁷ In addition, coloured visuals have been shown in a number of studies to increase memory performance.⁸ Therefore, using infographics to communicate information means it will be more likely that the information is processed faster, understood and remembered by the audience.

Of course there is also the novelty element and ‘cool factor’ as described by Smiciklas. In a world where people are faced with information overload daily, infographics are unique and so they stand out and are more noticeable to your

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² Mark Smiciklas, *The Power of Infographics: Using Pictures To Communicate and Connect With Your Audiences*, (Pearson Education, 2012), 3.

³ Jane Krauss, ‘Infographics: More than Words Can Say’, (2012) 39(5) *Learning & Leading with Technology* 10, 11.

⁴ Ibid, 10.

⁵ Smiciklas, above n 1, 7.

⁶ William Bradford, ‘Reaching the Visual Learner: Teaching Property Through Art’, (2004) 11 *The Law Teacher* 12.

⁷ Paul Martin Lester, *Syntactic Theory of Visual Communication* (2006), 3. <<https://blog.kareldonk.com/wp-content/uploads/2015/03/SyntacticTheoryofVisualCommunication.pdf>>, discussing Jerome Bruners work.

⁸ Miriam Dzulkifli and Muhammad Mustafar, ‘The Influence of Colour on Memory Performance: A Review’, (2013) 20(2) *The Malaysian Journal of Medical Sciences*, 3, 6.

Participating in tutorials

Tutorials are useful for:

- Consolidating your understanding of a topic/reading/lecture
- Examining a topic critically by:
 - asking questions
 - reflecting on the material
 - making links to related topics / ideas.

Attendance

Regular attendance is advisable. However, the decision to attend can be left entirely to the discretion of the student. Note that for some classes attendance is *compulsory*, whereas for others there can be a minimum number of tutorials that a student must attend. In some subjects, marks are awarded for student participation. Check with your tutor or in your unit guide.

Expectations

You will be expected to:

- Answer questions from the lecturer, tutor and/or other students
- Contribute to discussion by sharing and comparing ideas
- Take ownership of your learning by seeking clarification of any material you do not fully understand

Preparation

It is essential to complete all set tasks, such as the required reading or set questions, before your tutorial so that you can participate fully in the discussion. Reflect on unit learning objectives and think of questions arising from the reading or the lecture that you can ask during the tutorial.

To contribute:

- Think of several questions/examples/comments you would like to make. Form them into sentences; practice them in your head and out loud.
- Look for pauses during the tutorial session to enable you to enter the discussion.
- Indicate that you want to speak by making eye contact with the tutor or by taking a more alert body posture.
- You can enter the discussion by:
 - agreeing with what someone has said and adding your own thoughts
 - disagreeing with what someone has said and providing reasons for your position
 - raising new points / questions.
 - linking the discussion back to the weekly readings
 - Finish any unfinished work.
 - Associate concepts with terms.
- *E.g. "I agree with what [NAME] said about _____. In my view..."*
- *E.g. "I think [NAME] made an interesting point; however, in my opinion..."*
- *E.g. "I think that one aspect we have not considered is..."*
- *E.g. "According to [AUTHOR]..." or "In her article, [AUTHOR] argued that..."*

After the tutorial:

- Continue the discussion with your classmates
- Contact the tutor to clarify any important points you didn't understand
- Revise. Sit down and consolidate the concepts that you have learned.
- Enter questions in your notebook; write answers.
- Check terms/ jargon.

audience.⁹ Infographics are also popular and shareable – the majority of infographic programs allow the content to be shared via social media, embedded on websites or downloaded as PDFs. This broadens their reach and allows for more varied opportunities for their use.

Considering this topic from an alternative position, many studies have also discussed the benefits of having *students* create infographics as a learning tool to develop their visual and digital literacy skills.¹⁰

Creating Infographics

Usage

Infographics are incredibly versatile, and can lend themselves to a wide variety of designs and purposes. Many infographic programs allow the creator to choose from pre-determined templates to create posters, timelines, invitations, resumes, presentations, handouts and more.

There are countless different examples of how infographics can be used. Infographics can be useful to create instructions for face to face library classes, or handouts for activities. They are helpful to convey complex information about a particular topic, and these graphics can then be

used online within eLearning modules. Schedules can easily be set out using a timeline template, to show upcoming library sessions over a period of time. One academic has even used infographics to successfully simplify their course syllabus.¹¹ Many people have utilised infographics to clearly explain data in an engaging way. Libraries gather many statistics, however using these statistics to ‘tell a story’ and promote the library’s achievements can be a challenge. By visually representing facts

and figures in an infographic, the audience will find the data more interesting, easier to understand and will be more likely to remember the key points made. When advocating for a library, these benefits are invaluable.

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Design

To have these desired effects, the infographic still needs to be designed well. An infographic that is too visually busy or illogically ordered will do no more to communicate your information effectively than a plain text document would. Taguchi and Ackerman have reviewed several authors’ research in this area, to determine the key characteristics of an effective and well-designed infographic.¹² One characteristic that continually arises as a fundamental aspect is that the

⁹ Smiciklas, above n 1, 16.

¹⁰ See, eg, Sidneyeve Matrix, ‘Teaching with Infographics: Practicing New Digital Competencies and Visual Literacies’, (2014) 4(2) *Journal of Pedagogic Development* <<https://journals.beds.ac.uk/ojs/index.php/jpd/article/view/283/440>>

¹¹ Curtis Newbold, ‘Would a Course Syllabus Be Better as an Infographic?’ on Curtis Newbold, *The Visual Communication Guy* (2 July 2014) <<http://thevisualcommunicationguy.com/2014/07/02/would-a-course-syllabus-be-better-as-an-infographic/>>

¹² Kellie Taguchi and Lyn Ackerman, ‘The Infographic: Is there a Place in Higher Education?’ in T. Bastiaens (ed), *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2014* (Association for the Advancement of Computing in Education (AACE), 2014), 1901.

Participating in tutorials

Quick study guide

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- *reflecting on the material
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<p>You can enter the discussion by:</p>	<p>After the tutorial:</p>
<p>Raising new points / questions.</p> <p><i>E.g. "I think that one aspect we have not considered is..."</i></p> <p>Linking the discussion back to the weekly readings</p> <p><i>E.g. "According to [AUTHOR]..." or "In her article, [AUTHOR] argued that..."</i></p>	<ul style="list-style-type: none"> *Continue the discussion with your classmates. *Contact the tutor to clarify any important points you didn't understand. *Finish any unfinished work. *Revise. Sit down and consolidate the concepts that you have learned. *Enter questions in your notebook; write answers. *Check new terms or jargon.
	
<div style="text-align: center;">  <h1>MONASH University</h1> <p>Brought to you by Monash University Library.</p> </div>	

infographic must ‘tell a story’ – it must have a purpose, a beginning, a middle and an end.¹³ This logical structure enables the audience to clearly understand the content at a glance. It is important to think about clarity – infographic creators should utilise white space effectively, limit the information to only the most important points, and make clear sections within the graphic to break up information.

Through trial and error, good design will become evident to the infographic creator. A good guiding principle is to keep it simple. Limiting fonts and colours to create consistency within the infographic is good practice. For example, using mainly blue but incorporating different shades is an effective technique. As well as utilising mainly one font, and adding italics or bold styles for emphasis. Because an infographic is all about visual imagery, the amount of text included should be limited. The creator will need to think about whether there is an image, icon or chart which would convey the same meaning as a block of text. The tone of the infographic can be either formal or informal depending on how it is designed. Finally, it is important to consider how the audience will be consuming the information – will the infographic need to be printed? If so, the page size is important, as is colour selection so that it will be readable in both colour and black and white.

Programs

Two programs for creating infographics were explored in the ALLA workshop, however there are many free tools available on the internet.

The two that were selected for discussion were *Piktochart*¹⁴ and *Canva*,¹⁵ as these offer free accounts, good flexibility and are intuitive to use. Other options include *Vennage*, *Visual.ly*, *Easel.ly*, *Infogr.am* and *Dipity* to name a few.

Both *Piktochart* and *Canva* offer mobile app versions of their software. Users simply create a free account and can utilise the provided tutorials to get started. Both programs are cloud based and offer a host of templates, icons and images for use in the infographic design. They both offer a basic free service, with additional features available for a fee. Functionalities include the ability to hyperlink, upload images, download the infographic, and share via social media.

One benefit of *Piktochart* is that it has the additional functionality to create graphs and charts within the program. Users can import data from excel, or input it manually, to create eye-catching representations of the data straight onto the infographic.

One benefit of *Canva* is that it does not offer a monthly subscription fee structure. This means users can create a lot more within the free service, as well as download in PDF format for free, while only paying for images individually if they are selected for use.

Conclusion

Research has shown that utilising visual communication strategies leads to a multitude of benefits for memory and learning. The development of

¹³ See, eg, Annette Lamb and Larry Johnson, ‘Infographics Part 1: Invitations to Inquiry’ (2014) 41(4) *Teacher Librarian*, 54.

¹⁴ <<https://piktochart.com/>>

¹⁵ <<https://www.canva.com/>>

visual aids is now free and simple due to the extensive availability of online design programs. Information professionals should therefore utilise new technologies, such as infographics, to take advantage of these benefits. By doing so, librarians can enhance engagement with patrons and colleagues, and improve the understanding and retention of important information.

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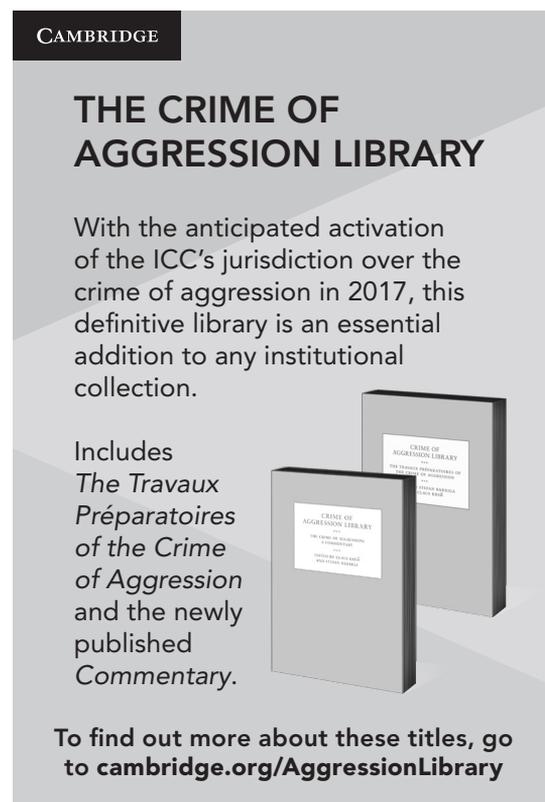
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