PEDOMAN PENULISAN
ARTIKEL PUBLIKASI ILMIAH

PROGRAM PASCASARJANA
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BAB I
PENDAHULUAN

"You have conducted a study and analyzed the data. Now it is time to write. To publish. To tell the world what you have learned"
(Writing the Empirical Journal Article, Daryl J. Bem, Cornell University, 2003)

Salah satu cara untuk mengkomunikasikan hasil-hasil karya ilmiah secara luas adalah dengan melalui tulisan, baik yang berupa suatu laporan ilmiah maupun tulisan-tulisan dalam majalah ilmiah. Dalam rangka untuk membuat karya tulis ilmiah, penulis harus mematuhi kaidah-kaidah yang telah disepakati oleh para pakar serta mengikuti alur-alur pemikiran yang konseptual dan prosedural.

Suatu hal yang harus dipegang teguh oleh penulis adalah "*konsistensi*", atau kebulatan hati dalam menuangkan pernyataan-pernyataan dengan memegang teguh titik pandang tentang suatu "hal", dimana terkait didalamnya arti dan makna serta pemakaian suatu istilah dan ketaatan dalam mengikuti suatu sistem penulisan.

Membuat tulisan ilmiah berarti menulis berdasarkan dan berorientasi kepada pemikiran yang runtut dan telah teruji keabsahannya, sehingga kebenarannya dapat dipertanggung-jawabkan. Untuk itu penulis harus mempunyai sikap ilmiah dan kemandirian yang konsisten. Bagi penulis muda sikap ilmiah atau kemandirian ini mempunyai arti : sikap ingin tahu, sikap kritis, sikap terbuka, sikap obyektif, sikap rela dan tulus ikhlas menghargai karya orang lain, sikap berani dalam mempertahankan kebenaran dan mempunyai wawasan masa depan.

Menulis secara ilmiah dapat juga dipandang sebagai "seni" sehingga pengalaman dalam menulis lebih banyak berperan dalam menambah bobot tulisan. Melalui latihan, penguasaan memilih kata-kata yang tepat dan kemudian disusun dalam bentuk kalimat yang memenuhi kaidah tata bahasa yang benar, maka ketrampilan menulis akan meningkat, sehingga sikap ilmiah penulis akan semakin berkembang sejalan dengan bertambahnya pengalaman.

Kelihaian dalam hal tulis menulis ini dapat dipercepat apabila penulis menerapkan dan menguasai prinsip -prinsip menulis karya ilmiah. Salah satu karya tulis yang bersifat ilmiah adalah laporan ilmiah, yang seringkali dipakai dan digunakan dalam kalangan yang relatif terbatas. Laporan ilmiah ini dapat menjangkau kalangan yang lebih luas apabila ditulis kembali dan dipublikasi dalam bentuk artikel jurnal ilmiah pada majalah ilmiah yang merupakan sarana komunikasi antara penulis dengan pembaca ataupun antara penulis dengan lembaga-lembaga yang menggunakan hasil tulisan tersebut.

"The primary criteria for good scientific writing are accuracy and clarity. If your article is interesting and written withstyle, fine. But these are subsidiary virtues. First strive for ***accuracy and clarity****"(Bem, 2003).*

The first step toward clarity is ***good organization****, and the* ***standardized format*** *of a journal article does much of the work for us. It not only permits readers to read the report from beginning to end, as they would any coherent narrative, but also to scan it for a quick overview of the study or to locate specific information easily by turning directly to the relevant section. Within that format, however, it is still helpful to work from an outline of researcher own. This enables researcher to examine the logic of the sequence, to spot important points that are omitted or misplaced, and to decide how best to divide the labor of presentation between the introduction and final discussion (about which, more later).*

The second step toward clarity ***is to write simply and directly****. A journal article tells a straightforward tale of a circumscribed problem in search of a solution. It is not a novel with subplots, flashbacks, and literary allusions, but a short story with a single linear narrative line. Let this line stand out in bold relief. Don't make any voice struggle to be heard above the ambient noise of cluttered writing. You are justifiably proud of your 90th percentile verbal aptitude, but let it nourish your prose, not glut it. Write simply and directly.*

BAB II
JURNAL ILMIAH TERAKREDITASI

2.1. Jurnal Ilmiah

Jurnal ilmiah dapat didefinisikan sebagai bentuk publikasi ilmiah berkala yang memuat hasil kegiatan bidang keilmuan tertentu, baik berupa hasil pengamatan empirik maupun kajian konseptual, yang bersifat penemuan baru, maupun koreksi, pengembangan, dan penguatan terhadap paradigma, konsep, prinsip, hukum, dan teori yang sudah ada. Jurnal ilmiah merupakan sarana komunikasi antar anggota komunitas bidang keilmuan tertentu. Dengan sarana ini, para ilmuwan berinteraksi satu sama lain dan saling mengisi untuk membangun suatu bidang keilmuan. Konsekwensi dari karakteristik yang mengarah pada "eklusivitas" bidang keilmuan menyebabkan pembaca suatu jurnal ilmiah menjadi relatip terbatas.

Keterbatasan pembaca menyebabkan sering penerbitan jurnal ilmiah tidak memiliki kelayakan fiansial. Keberadaan jurnal ilmiah disebabkan kebutuhan nyata masyarakat ilmiah, untuk, (a) memperoleh kritikan, saran, dan masukan lainnya bagi karyanya, (b) pengakuan keilmuan dan promosi jabatan, (c) rujukan terbaru, (d) ide aktual untuk kajian lanjutan, dan (e) mengikuti perkembangan ilmu pengetahuan dan teknologi. Dengan demikian, kesinambungan jurnal ilmiah sangat tergantung pada kuatnya komitmen organisasi profesi dan lembaga perguruan tinggi terhadap perkembangan ilmu pengetahuan dan teknologi.

Jurnal ilmiah seyogyanya memuat (a) kumpulan informasi terbaru, (b) hasil objektif dari sebuah kajian ilmu, dan (c) rekomendasi. Untuk memperoleh bahan seperti yang dimaksud, maka harus dilakukan langkah-langkah metode ilmiah. Isi jurnal ilmiah seyogyanya adalah hasil penelitian. Walaupun demikian, dimungkinkan pemuatan artikel konseptual dan telaah (*review*).

Artikel jurnal ilmiah diharapkan aktual dan berguna meskipun penulisan artikel tersebut telah dilakukan dalam waktu yang cukup lama. Dengan kata lain tetap dapat dimanfaatkan sebagai sumber pengetahuan. Hasil penelitian ilmiah merupakan sumber artikel jurnal ilmiah. Artikel hasil penelitian merupakan tulisan yang paling sering dimuat dalam jurnal ilmiah. Sehingga ada identifikasi bahwa jurnal ilmiah adalah kumpulan artikel hasil penelitian ilmiah.

2.2. Akreditasi Jurnal Ilmiah

Akreditasi merupakan salah satu bentuk penilaian (evaluasi) mutu dan kelayakan suatu jurnal ilmiah yang dilakukan oleh organisasi atau badan mandiri di luar pengelolan jurnal ilmiah. Bentuk penilaian mutu eksternal

yang lain adalah penilaian yang berkaitan dengan akuntabilitas, pemberian status, pemberian lisensi oleh badan tertentu. Ada juga pengumpulan data oleh badan pemerintah bagi tujuan tertentu, dan survei untuk menentukan peringkat *(ranking)* suatu kelembagaan.

Berbeda dari bentuk penilaian mutu lainnya, akreditasi dilakukan oleh pakar sejawat dan mereka yang memahami hakekat pengelolaan jurnal ilmiah, sebagai Tim Assessor. Keputusan mengenai mutu didasarkan pada penilaian terhadap berbagai bukti yang terkait dengan standar yang ditetapkan dan berdasarkan nalar dan pertimbangan para pakar sejawat *(judgments of informed experts)*. Bukti-bukti yang diperlukan termasuk publikasi jurnal yang disiapkan oleh pengelolan jurnal ilmiah yang akan diakreditasi yang diverifikasi melalui desk-evaluation para pakar sejawat yang ditunjuk menjadi Tim Assessor.

Akreditasi merupakan suatu proses dan hasil. Sebagai proses, akreditasi merupakan suatu upaya untuk menilai dan menentukan status kualitas jurnal ilmiah berdasarkan standar mutu yang telah ditetapkan. Sebagai hasil, akreditasi merupakan status mutu jurnal ilmiah yang diumumkan kepada masyarakat.

Peningkatan kualitas jurnal ilmiah yang bersumber dari hasil-hasil penelitian melibatkan banyak hal yang harus diperhatikan. Penamaan Jurnal / Berkala Ilmiah, Kelembagaan Penerbit dan Penyuntingan merupakan bagian inti dari penilaian suatu jurnal dapat terkareditasi. Bobot penilaian dari masing-masing parameter tidak sama. Hal yang sangat perlu diperhatikan dalam menghindari kegagalan akreditasi adalah memperhatikan kriteria eligibilitas jurnal ilmiah, mencermati butir-butir instrumen akreditasi yang dapat dikendalikan oleh pengelola jurnal dan membangun kerja sama yang baik dengan para penulis agar naskahnya bermutu.

Tujuan akreditasi jurnal ilmiah pada hakekatnya adalah untuk meningkatkan kualitas jurnal ilmiah sehingga dapat meningkatkan komunikasi ilmiah di antara para peneliti dan masyarakat pengguna. Sasaran akhir dari komunikasi ini adalah pengembangan ilmu pengetahuan dan kebutuhan pembangunan di Indonesia.

Usulan akreditasi Jurnal Ilmiah diajukan oleh Ketua Dewan Redaksi Jurnal Ilmiah dengan memenuhi persyaratan sebagai berikut :

1. Jurnal yang diusulkan akreditasinya telah terbit minimal selama 3 (tiga) tahun berturutan, terhitung mundur mulai tanggal pengajuan akreditasi.
2. Frekuensi penerbitan jurnal ilmiah minimal 2 (dua) kali dalam satu tahun secara teratur.
3. Jumlah tiras tiap kali penerbitan minimal 300 eksemplar.
4. Diterbitkan Oleh Perguruan Tinggi di bawah Depdiknas, Perguruan Tinggi Kedinasan yang telah mempunyai kerjasama dengan Depdiknas serta Himpunan Profesi.

2.3. Instrumen Evaluasi untuk Akreditasi Jurnal Ilmiah (DP3M, 2006)

A. Penamaan Berkala

Variabel, Indikator, dan Skor

Kesesuaian Nama:

a. Sangat spesifik sehingga mencerminkan superspesialisasi atau spesialisasi disiplin ilmu (5)
b. Spesifik dan menggambarkan disiplin ilmu (4)
c. Agak spesifik tetapi meluas mencakup bidang ilmu (3)
d. Kurang spesifik dan bersifat umum (2)
e. Hampir tidak spesifik dan bersifat umum (1)
f. Tidak spesifik karena menggunakan nama lembaga dan/atau lokasi (0)

Penjelasan

Berkala menggunakan nama yang bermakna, tepat dan singkat sehingga mudah diacu. Dengan memerhatikan tradisi bidang ilmu terkait, diinginkan adanya keselarasan antara nama berkala dan disiplin ilmu, bidang akademis, atau profesi. Nama yang dipakai sebaiknya menonjolkan bidang ilmu, dan bukannya nama lembaga atau kota penerbitnya. Bahasa nama berkala dan maknanya hendaklah cukup dikenal dan dipahami dalam lingkungan keilmuan terkait.

B. Kelembagaan Penerbit (5)

Variabel, Indikator dan Skor

1. Pranata Penerbit:
   a. Organisasi profesi ilmiah (5)
   b. Organisasi profesi ilmiah bekerja sama dengan lembaga (4)
   c. Badan penerbitan mandiri (3)
   d. Satuan organisasi teknis lembaga (2)
   e. Lembaga induk (1)
   f. Bentuk satuan lain (0)
2. Pelembagaan Landasan Hukum:
   a. Tidak memiliki ISSN (-1)

Penjelasan

1. Lembaga penerbit berkala (seperti organisasi profesi ilmiah, badan penerbit, lembaga penelitian, perguruan tinggi) memiliki ketetapan hukum (badan hukum), sehingga mampu memberikan jaminan kesinambungan dana dan naungan hukum. Semakin independen afiliasi kelembagaan penerbit, semakin tinggi nilai berkalanya. Pengelolaan penerbitan berkala dimandatkan pada suatu satuan organik independen dan bersifat teknis, yang tidak akan terlalu terpengaruh oleh adanya perubahan reorganisasi lembaga sehingga akan memiliki kantor, ruang kerja, dan alamat yang tetap.
2. Kegiatan penerbitan berkala ilmiah harus melembagakan landasan standardisasi nasional, terutama dalam kaitannya dengan ISSN serta

segala peraturan perundangundangan yang berlaku lainnya. Berkala ilmiah yang tidak ber-ISSN mendapat disinsentif.

C. Penyuntingan (21)

Variabel, Indikator, dan Skor

1. Penelaahan oleh Mitra Bestari:
   a. Melibatkan mitra bestari internasional >50% (10)
   b. Melibatkan mitra bestari nasional >50% (7)
   c. Melibatkan mitra bestari setempat (4)
   d. Tidak melibatkan mitra bestari (0)
2. Kualifikasi Anggota Sidang Penyunting:

a. S2/peneliti dan/atau S3/guru besar/ahli peneliti, yang sudah pernah menulis artikel di berkala tingkat nasional/internasional ≥50% (3)

b. S2/peneliti dan/atau S3/guru besar/ahli peneliti, yang sudah pernah menulis artikel di berkala tingkat nasional/internasional < 50% (2)

c. Hanya S1 atau di bawahnya (1)

3. Keterlibatan Aktif Mitra Bestari dalam Menjaga Mutu Isi Berkala:
   a. Sangat nyata (5)
   b. Nyata (3)
   c. Tidak nyata (0)
4. Dampak Kinerja Penyunting Pelaksana terhadap Mutu Penampilan Berkala:
   a. Sangat nyata (3)
   b. Nyata (2)
   c. Tidak nyata (0)

Penjelasan

1. Penyuntingan berkala ilmiah modern menuntut digunakannya sistem penelaahan dan penyaringan secara anonim oleh mitra bestari (*review by peer group system*) yang melibatkan ahli dan penilai dari lingkungan luas. *Mereka ini bukan anggota sidang atau dewan penyunting* yang dibuktikan keterlibatannya dalam proses penyuntingan dengan adanya korespondensi atau pencantuman nama di akhir tiap jilid. Keinternasionalan kepakaran seorang mitra bestari ditentukan oleh jumlah publikasi berbahasa asing, keseringan karya/pendapatnya diacu secara luas, keterlibatan kecendekiaannya dalam forum internasional, dan bentuk-bentuk pengakuan ilmiah berbobot lain.
2. Para penyunting hendaklah terdiri atas perorangan berkualifikasi dan berpengalaman yang mempunyai waktu, kemauan, kemampuan, dan komitmen. Pengangkatan resmi seseorang sebagai anggota sidang penyunting dilakukan bukan karena jabatan struktural *ex officio* tetapi karena kualifikasi kespesialisan seseorang. Organisasi dan penggarisan wewenang serta tugas (misalnya penyunting penyelia, penyunting pe-

laksana, penyunting tamu) hendaklah dinyatakan secara tegas dan gamblang. Cakupan mandat dan bidang keilmuan diupayakan agar lengkap terwakili oleh anggotanya dalam sesuatu sidang atau dewan penyunting.

3. Keterlibatan mitra bestari, para penelaah tamu, dan anggota sidang penyunting berkala ilmiah diukur dari mutu *isi* berkala baik substansi teknis maupun kebakuan bahasa dan peristilahan setiap artikel yang dimuatnya.
4. Kinerja dan kegiatan pelaksanaan penyuntingan dapat dinilai dari mutu *penampilan* hasil penyuntingan yang diperlihatkan oleh terbitan berkala ilmiahnya. Dalam kaitan ini peran aktif penyunting pelaksana akan sangat menentukan.

D. Penampilan (9)

Variabel, Indikator, dan Skor

1. Ukuran:
   a. Konsisten (1)
   b. Tidak (0)
2. Tata Letak:
   a. Konsisten (1)
   b. Tidak (0)
3. Tipografi:
   a. Konsisten (huruf dan spasi) (2)
   b. Ya/tidak (1)
   c. Tidak (0)
4. Jenis Kertas:
   a. Konsisten (1)
   b. Tidak (0)
5. Jumlah Halaman:
   a. Selisih tidak melebihi 5 % (2)
   b. Selisih tidak melebihi 25 % (1)
   c. Selisih melebihi 25 % (0)
6. Tekstur Sampul:
   a. Konsisten (1)
   b. Tidak (0)
7. Rancangan Sampul:
   a. Berpenciri (1)
   b. Kurang berpenciri 0,5)
   c. Tidak berpenciri (0)

Penjelasan

1. Konsistensi ukuran suatu berkala harus dijaga ketat.
2. Konsistensi tata letak (*lay out*) – yang mencakup pengaturan bentuk dan ukuran huruf untuk pelbagai keperluan, penataan jarak dan ruang, peletakan baris judul dan alinea, sistem penempatan ilustrasi dan lain-lain – setiap berkala dituntut agar dipertahankan karena menentukan

perwajahan halaman sehingga akan ikut mencirikan gaya selingkung berkalanya.

3. Konsistensi tipografi (yang meliputi macam, bentuk dan ukuran muka huruf, spasi di antara baris, penggunaan huruf kapital atau huruf kursif) untuk setiap penerbitan nomor berkala mutlak harus dijaga benar.
4. Jenis kertas (macam, warna, dan ketebalan, yang ditentukan berdasarkan bobot selembar kertas per 1 m^2, kandungan bahan) yang dipakai dalam setiap kali berkala terbit harus seragam.
5. Jumlah halaman dalam setiap jilid dituntut untuk konsisten. Disarankan agar tebal satu jilid atau volume – yang tidak harus terikat tahun terbit – minimum 200 halaman (sehingga berpenanda atau bernomor halaman 1 – 200).
6. Tekstur sampul (bahan atau macam kertas, keadaan permukaan, kekuatan dan keopakan, serta corak) berkala hendaklah memiliki kemantapan yang dapat dikenali. Dengan perkataan lain, sampul dapat berganti warna atau gambar, namun nama berkala, logo, dan penataan umum harus tetap dan konsisten.
7. Penampilan umum berkala hendaklah diupayakan memiliki rancangan menonjol (*eye catching*) yang berpenciri dengan keunikan khas, sehingga jika disimpan dalam sebuah meja pajangan bersama kumpulan berkala lain akan dapat segera terkenali dari jauh.

Catatan:

UNESCO merekomendasikan agar secara bertaat asas berkala diterbitkan dengan kertas berukuran A4, 210 x 297 mm.

E. Gaya Penulisan (11)

Variabel, Indikator, dan Skor

1. Keefektifan Judul:
   a. Baku dan lugas (1)
   b. Baku tetapi tidak lugas (0,5)
   c. Tidak baku (0)
2. Pencantuman Nama Penulis dan Lembaga:
   a. Baku dan lengkap (pengarang dan lembaga beralamat) (1)
   b. Baku tetapi tidak lengkap (hanya pengarang) (0,5)
   c. Tidak baku, misalnya ditulis pengarang *dkk* (0)
3. Abstrak:
   a. Ada dan isinya utuh menggambarkan esensi artikel (1)
   b. Ada tetapi tidak menggambarkan esensi artikel (0,5)
   c. Tidak ada (0)
4. Kata Kunci:
   a. Ada dan mencerminkan konsep penting dalam artikel (1)
   b. Ada tetapi tidak mencerminkan konsep penting dalam artikel (0,5)
   c. Tidak ada (0)

5. Sistematika Penulisan/Pembaban:
   a. Lengkap dan bersistem baik (1)

b. Lengkap tetapi tidak bersistem (0,5)
c. Kurang lengkap dan tidak bersistem (0)

6. Pemanfaatan Instrumen Pendukung:
   a. Informatif dan komplementer (1)
   b. Informatif tetapi tidak komplementer (0,5)
   c. Kurang informatif dan tidak komplementer (0)
7. Cara Pengacuan dan Pengutipan:
   a. Baku dan Konsisten (1)
   b. Baku tetapi tidak konsisten (0,5)
   c. Tidak baku (0)
8. Penyusunan Daftar Pustaka:
   a. Baku dan konsisten (1)
   b. Baku tetapi tidak konsisten (0,5)
   c. Tidak baku (0)
9. Petunjuk bagi Calon Penulis:
   a. Rinci (1)
   b. Tidak rinci (0,5)
   c. Tidak ada (0)
10. Peristilahan Baku, Bahasa Baik dan Benar:
   a. Baik (2)
   b. Cukup (1)
   c. Buruk (0)

Penjelasan

1. Judul artikel dalam berkala ilmiah haruslah spesifik dan efektif. Keefektifannya antara lain diukur dari kelugasan penulisannya (yang tidak boleh lebih dari 14 kata dalam tulisan berbahasa Indonesia, atau 10 kata bahasa Inggris, atau 90 ketuk pada papan kunci) sehingga sekali baca dapat ditangkap maksudnya secara komprehensif.
2. Kemantapan dan kemapanan pencantuman baris kredit (*byline*) yang meliputi nama -nama penulis (yang harus tanpa gelar akademis atau indikasi jabatan dan kepangkatan) dan alamat lembaga tempat kegiatan penelitian dilakukan, serta penunjukan alamat korespondensi kalau berbeda (berikut alamat *e-mail* bila dipersyaratkan), supaya diberikan secara jelas dan bertaat asas.
3. Setiap artikel dalam berkala ilmiah harus disertai satu paragraf abstrak (bukan ringkasan yang terdiri atas beberapa paragraf) secara gamblang, utuh, dan lengkap menggambarkan esensi isi keseluruhan tulisan. Abstrak berbahasa Inggris yang baik susunannya selalu harus ada.
4. Kata kunci yang berfungsi karena dipilih secara cermat sehingga mampu mencerminkan konsep yang dikandung artikel terkait merupakan kelengkapan artikel ilmiah untuk membantu peningkatan keteraksesan artikel yang bersangkutan.
5. Kecermatan tata cara penyajian tulisan sehingga memiliki sistematika dan pembaban yang baik sesuai dengan jenis artikel serta sistem yang dianut disiplin ilmunya merupakan ciri berkala ilmiah yang bernilai tinggi. Berkala hendaklah tidak memuat tulisan dengan bentuk

pembaban mirip penulisan skripsi, dengan mencantumkan kerangka teori, pernyataan masalah, kegunaan penelitian, saran tindak lanjut, dan sejenisnya.

6. Di dalam bidang ilmu tertentu penulisan artikel dituntut untuk menggunakan semua sarana pelengkap (seperti gambar, foto, tabel, dan grafik) untuk mendukung pemaparan deskriptif.
7. Gaya selingkung berkala meliputi sistem pengacuan pustaka (nama-tahun, urut nomor, catatan kaki, catatan akhir) serta cara pengutipan yang harus dijaga kebakuan dan kemantapannya
8. Penyusunan daftar pustaka (sistem Harvard, sistem Vancouver, tahun di depan atau di belakang, bahan acuan atau bahan bacaan/bibliografi) harus pula dilakukan secara baku dan konsisten.
9. Petunjuk bagi penulis agar diberikan secara jelas dan terperinci dalam setiap jilid supaya ketaatasasan pada gaya selingkung berkala dapat dipertahankan.
10. Berkala ilmiah dicirikan oleh penggunaan istilah yang baku dan bahasa yang baik dan benar.

F. Substansi Isi (36)

Variabel, Indikator, dan Skor

1. Cakupan Keilmuan Berkala:
   a. Superspesialis, misalnya taksonomi jamur (5)
   b. Spesialis, misalnya fisiologi tumbuhan (4)
   c. Cabang ilmu, misalnya botani (3)
   d. Disiplin ilmu, misalnya biologi (2)
   e. Kombinasi berbagai disiplin ilmu (1)
2. Aspirasi Wawasan Berkala:
   a. Internasional (5)
   b. Regional (4)
   c. Nasional (3)
   d. Kawasan (2)
   e. Lokal (1)
3. Kepioneran Ilmiah Isi Berkala:
   a. Tinggi (5)
   b. Cukup (4)
   c. Sedang (3)
   d. Kurang (2)
   e. Rendah (1)
4. Sumbangan Berkala pada Kemajuan Ilmu dan Teknologi:
   a. Tinggi (5)
   b. Cukup (4)
   c. Sedang (3)
   d. Kurang (2)
   e. Rendah (1)
5. Dampak Ilmiah Berkala:
   a. Tinggi (5)
   b. Cukup (4)

c. Sedang (3)
d. Kurang (2)
e. Rendah (1)

6. Kadar Perbandingan Sumber Acuan Primer: Lainnya
   a. >80% (2)
   b. 40 – 80% (1)
   c. <40% (0.5)
7. Derajat Kemutakhiran Pustaka Acuan:
   a. >80% (3)
   b. 40-80% (2)
   c. <40% (1)
8. Analisis dan Sintesis:
   a. Baik (3)
   b. Cukup (2)
   c. Kurang (1)
9. Penyimpulan dan Perampatan:
   a. Baik (3)
   b. Cukup (2)
   c. Kurang (1)

Penjelasan

Sekalipun terkesan bersifat subjektif, penilaian terhadap bobot dan mutu substansi ilmiah berkala mutlak diperlukan, dan dilakukan secara objektif dengan jalan membandingkannya dengan berkala sejenis yang sudah dianggap mapan.

1. Cakupan bidang keilmuan berkala merupakan indikator mutu substansi yang penting, dengan catatan bahwa makin dalam kespesialisasiannya makin tinggi nilainya. Berkala yang bersifat bunga rampai tidak besar dampak ilmiahnya terhadap pemajuan disiplin ilmu.
2. Aspirasi wawasan berkala diukur dari luas jangkauan pembaca yang ingin dicapai, antara lain melalui bahasa, daerah asal penyumbang tulisan, ruang lingkup dan wilayah geografi yang diliput, dan mitra bestari yang dilibatkan. Keuniversalan lebih dipentingkan dibandingkan dengan kenasionalan, apalagi kelokalan.
3. Kepioneran isi berkala ditentukan oleh kemutakhiran *state-of-the-art* ilmu dan teknologi yang dikandung, kecanggihan sudut pandang dan pendekatan, kebaruan temuan bagi ilmu (*novelties, new to science*) yang disajikan, ketuntasan penggarapan (tidak hanya mengulang penelitian sejenis sebelumnya, tidak memermutasikan metodologi dan objek, tidak memecah satu persoalan penelitian dalam serangkaian tulisan), dan kehebatan teori serta keluasan perampatan setiap artikel yang dimuatnya. Dengan demikian berkala tidak akan memuat artikel yang hanya bersifat ulasan atau referat.
4. Sumbangan berkala pada kemajuan ilmu dan teknologi diukur dari derajat keorisinalan dan makna kontribusi ilmiah temuan/gagasan/hasil pemikiran dalam tulisan yang dimuatnya sesuai

dengan bidang ilmunya, yang akan menentukan posisi majalah dalam percaturan pengembangan dan penguasaan ilmu.

5. Dampak ilmiah berkala antara lain dapat dinilai dari tinggi frekuensi pengacuan terhadap tulisan yang dimuatnya, peranannya untuk berfungsi sebagai pemacu kegiatan penelitian berikutnya, kemampuannya 'membesarkan' nama ilmuwan dan pandit yang sudah ditampung buah tangannya, pengaruhnya pada lingkungan ilmiah serta pendidikan, dan besarnya jumlah tiras.
6. Nisbah perbandingan sumber pustaka primer dan bahan lainnya menentukan bobot pemikiran dan gagasan yang dijadikan kerangka penulisan, sebab semakin tinggi pustaka primer yang diacu semakin bermutu pula tulisannya.
7. Derajat kemutakhiran bahan yang diacu dengan melihat proporsi terbitan 10 tahun terakhir, merupakan tolok ukur mutu berkala ilmiah yang penting. Keseringan pengarang mengacu pada diri sendiri *(self citation)* dapat mengurangi nilai berkala.
8. Ketajaman analisis dan sintesis yang dilakukan secara kritis akan meningkatkan martabat dan mutu berkala ilmiah.
9. Penarikan kesimpulan dan perampatan yang meluas, serta pencetusan teori baru yang dituangkan secara mapan akan membuat berkala lebih bermakna dibandingkan dengan memuat tulisan yang berisi kesimpulan dangkal dan saran bahwa penelitiannya perlu dilanjutkan.

Catatan:
Untuk etiket penelitian dalam bidang tertentu sebaiknya dimintakan *ethical clearance* dari komisi etik yang bersangkutan, terutama untuk penelitian yang melibatkan manusia dan hewan sebagai sasaran dan tujuan penelitiannya.

G. Keberkalaan (10)

Variabel, Indikator, dan Skor

1. Jadwal Penerbitan:
   a. Jadwal sesuai dengan yang ditentukan (2)
   b. Jadwal tidak sesuai (1)
   c. Tidak menyebut jadwal penerbitan (0)
2. Tata Penomoran Berkala:
   a. Konsisten dan bersistem (2)
   b. Tidak konsisten tetapi bersistem (1)
   c. Tidak bersistem dan tidak konsisten (0)
3. Penomoran Halaman:
   a. Berurut dalam satu jilid (2)
   b. Tiap nomor dimulai dengan halaman (0)
4. Indeks Tiap Jilid:
   a. Indeks subjek dan indeks pengarang (2)
   b. Indeks subjek saja, atau pengarang saja (1)
   c. Tidak ada (0)
5. Sumber Dana:

a. Terjamin, dari luar dan dari lembaga induk (1)
b. Terjamin, dari lembaga induk saja (0,5)
c. Tidak terjamin (0)

6. Potensi Ketersediaan Naskah:
   a. >200% isi satu nomor (1)
   b. 100–200% isi satu nomor (0,5)
   c. <100% isi satu nomor (0)

Penjelasan

1. Ketaatan periode frekuensi penerbitan berkala haruslah sesuai dengan jadwal yang ditentukan. Perlu dicatat bahwa penerbitan tak teratur (*irregular*) merupakan ukuran keberkalaan yang diperkenankan, asal tegas dikatakan.
2. Kemantapan tata penomoran perlu dijaga sesuai dengan keberkalaan, yang dilakukan dengan mencantumkan nomor jilid atau volume (dapat dengan angka Romawi) dan nomor bagian (umumnya dengan angka Arab). Penomoran berkala ilmiah pada umumnya tidak tergantung pada tahun terbit.
3. Penomoran halaman berkala ilmiah dilakukan secara berkesinambungan dari 1-n dalam suatu jilid yang belum ditutup dengan indeks isi, dan bukan mulai lagi dari halaman 1 untuk setiap nomor bagian yang terbit.
4. Indeks penutup jilid penanda dilakukannya kendali keberkalaan, supaya diadakan. Indeks itu minimum terdiri atas indeks subjek dan indeks kumulatif pengarang dalam jilid terkait. Selain itu, indeks penutup jilid dapat pula memuat daftar tanggal tepat setiap nomor bagian diterbitkan, daftar penyandang dana yang menyumbang penerbitan, dan indeks mitra bestari yang berperan dalam penerbitan jilid bersangkutan.
5. Ketersediaan dana teratur adalah salah satu ukuran penjamin keberkalaan. Dana teratur yang diterima dari pihak luar memiliki nilai lebih tinggi dibandingkan dana yang disediakan lembaga induk.
6. Ketersediaan naskah yang berkelanjutan dapat diperiksa dari laporan proses penyaringan dan penelaahan naskah dengan melihat nisbah jumlah naskah yang diterima dan ditolak.

2.4. Kriteria Jurnal Ilmiah Internasional

Secara umum suatu publikasi ilmiah dikatakan beraspirasi internasional jika: Ditulis dalam salah satu bahasa PBB sehingga memiliki cakupan pembaca yang luas; Memuat artikel yang berisi sumbangan nyata bagi kemajuan suatu disiplin ilmu yang banyak diminati ilmuwan sedunia; Penerbitannya dikelola secara terbuka sehingga melibatkan dewan penyunting dari berbagai penjuru dunia, atau paling tidak setiap artikelnya diolah oleh pakar-pakar internasional melalui sistem penelaahan oleh mitra bestari dunia secara anonim; Penyumbang artikelnya berasal dari pelbagai negara yang lembaga-lembaganya memiliki pakar yang berspesialisasi dalam

bidang kekhususan berkala. Sejalan dengan itu persebaran berkalanya juga mendunia karena dilanggan oleh pelbagai lembaga dan pakar dari berbagai negara yang berminat pada disiplin ilmu termaksud (Ditjen Dikti, 2009).

Kriteria Umum Jurnal Ilmiah Internasional (DP3M 2006)

1. Bahasa yang digunakan adalah bahasa PBB (Inggris, Perancis, Spanyol, Arab, Cina)
2. Pengelolaan naskah sedemikian rupa sehingga naskah yang diterima cepat terbit (rapid review) dan ada keteraturan terbit
3. Jurnal berkualitas (prestige), bisa dilihat dari daftar penelaah naskahnya dan *Editorial Board*-nya yaitu pakar di bidangnya dalam dan luar negeri.
4. Dibaca oleh banyak orang di bidangnya, bisa dilihat dari distribusi/peredarannya (circulation).
5. Menjadi acuan bagi banyak peneliti (citation).
6. Tercantum dalam *Current Content* dan sejenisnya (di PDII ada juga majalah abstrak yang disebut Fokus, tapi berbahasa Indonesia).
7. Artikel yang dimuat berkualitas, bisa dilihat dari kemutakhiran topik dan daftar acuannya.
8. Penyumbang artikel/naskah berasal dari banyak negara
9. Penelaah berasal dari banyak negara yang terkemuka di bidangnya.
10. Menawarkan *off-prints/reprints*.
11. Terbit teratur sesuai dengan jadwal yang ditentukan.
12. Penerbitan jurnal tidak terkendala oleh dana.
13. Bukan jurnal Jurusan, Fakultas, Universitas atau Lembaga yang mencerminkan derajat kelokalan. Seyogyanya diterbitkan oleh himpunan profesi.
14. Memberi kesempatan penulis artikel membaca contoh cetak
15. Artikel yang dominan (kalau bisa > 80%), berupa artikel orisinil (hasil penelitian), bukan sekadar review atau ulasan.
16. Kadar sumber acuan primer >80%, derajat kemutakhiran acuan >80%.
17. Tersedia Indeks di setiap volume.
18. Ketersediaan naskah tidak menjadi masalah. Angka penolakan ≥60%
19. Mempertimbangkan *Impact Factor*, yaitu": Faktor ini dihitung tahunan.

$$\frac{\text{Jumlah sitasi pada artikel yang dimuat di jurnal X}}{\text{Jumlah artikel yang dimuat di jurnal X}}$$

BAB III
TAHAPAN MENYUSUN TULISAN ILMIAH

Biasanya seorang ilmuwan (*scientist*) akan merasa bangga apabila karya tulisnya diterima dan akan diterbitkan oleh editor dari suatu majalah ataupun diterima oleh redaksi jurnal , baik nasional maupun internasional. Kebanggaan ini nampaknya tidak terlalu berlebihan karena ilmuwan tersebut secara tidak langsung menjadi anggota atau kelompok elite profesi yang ditekuninya serta sekaligus dimuliakan karena pokok-pokok pikirannya dipakai sebagai teori.

Beberapa tahapan yang penting dan harus diketahui oleh penulis sebelum menulis tulisan ilmiah adalah sebagai berikut ini.

3.1. Mengkaji dan Tulisan ilmiah

Membuat karya tulis ilmiah berarti berkomunikasi dengan orang lain tentang ilmu pengetahuan dan teknologi, dengan kata lain memberikan informasi kepada pembaca tentang ilmu pengetahuan. Seringkali ada kecenderungan bahwa sedikit sekali para pembaca yang membaca tulisan ilmiah secara tuntas dari awal sampai akhir. Penyusun tulisan ini secara tidak sengaja mengamati pembaca yang mencari pustaka diperpustakaan dan apa yang dilakukan oleh sebagian besar pembaca adalah sebagai berikut.

Kebanyakan pembaca biasanya mengambil journal yang telah dipilihnya, selanjutnya melihat dan membaca daftar isi, melihat apakah ada topik atau judul yang menarik dan perlu diketahui. Kemudian membalik halaman dan membaca abstrak/ringkasan, selanjutnya melihat gambar dan tabel yang ada, terakhir membaca kesimpulan dan daftar pustaka. Dari pengamatan yang dilakukannya di perpustakaan tersebut terlihat bahwa pada dasarnya ada dua kelompok pembaca yang berminat membaca tulisan ilmiah. Kelompok pertama adalah pembaca yang satu profesi dengan penulis artikel ilmiah, yang selanjutnya pembaca tersebut akan membaca secara keseluruhan informasi yang ada dan kelompok yang kedua adalah pembaca yang hanya membaca hasil penelitian yang selanjutnya dipakai sebagai latar belakang pekerjaan yang akan atau sedang diselesaikan.

Dari hasil penelitian dan pengamatan yang dilakukan oleh para pakar dapat dibuat urutan bagian-bagian yang penting dari suatu tulisan ilmiah yang selalu menjadi sorotan utama bagi pencari informasi aktual (pembaca). Bagian-bagian tersebut adalah judul tulisan, abstrak/ ringkasan, gambar dan tabel, hasil dan pembahasan, dan yang sering juga dibaca adalah daftar pustaka.

Judul suatu tulisan ilmiah merupakan bagian yang terpenting karena bagian inilah yang pertama kali dibaca oleh pembaca, oleh karenanya judul suatu tulisan ilmiah harus memenuhi syarat atau paling tidak harus menarik dan menimbulkan rasa ingin membaca.

Abstrak atau abstrak/ringkasan harus dibuat sedemikian rupa sehingga mendorong pembaca untuk membaca lebih lanjut dan isi dari abstrak/ringkasan tersebut harus memberikan informasi yang pasti (definite information).

Pembaca sering melakukan apa yang disebut ***scanning*** yaitu membaca secara cepat untuk merangkum isi tulisan, untuk itu gambar dan tabel yang disajikan dalam naskah harus memberikan gambaran yang utuh dari hasil penelitian, yang selanjutnya pengertian isi dari gambar dan tabel tersebut dijelaskan dalam hasil dan dibahas.

3.2. Prinsip Dasar Membuat Tulisan Ilmiah

Karya ilmiah biasanya ditulis dan diterbitkan dengan tujuan agar jerih payah untuk membuktikan hipotesis kerja itu faktanya diakui dan dimuliakan sebagai teori, serta dipakai sebagai landasan atau penjelasan pernyataan ilmiah yang sebelumnya sudah dikemukakan ataupun yang belum dikemukakan. Oleh karenanya menulis tulisan ilmiah jauh lebih sukar dari pada menyampaikan data-data ilmiah.

Beberapa prinsip menulis yang perlu dikuasai bagi penulis pemula antara lain:

(1). Dalam angan-angan bayangkanlah pembaca adalah manusia yang spesifik, baik itu nyata atau imaginer. Para pembaca itu harus diandaikan misalnya sebagai kelompok intelegensia baik yang satu profesi maupun bukan.

(2). Sebelum memulai menulis harus sudah ditetapkan apa tujuan membuat tulisan. Oleh karenanya tiap-tiap paragraf, tiap kalimat, tiap kata harus jelas dan ikut mengambil bagian dalam isi tulisan secara utuh serta pada saat yang tepat. Dengan kata lain, penjelasan- penjelasannya tidak boleh "salah tempat".

(3). Menggunakan style dan gaya bahasa yang sederhana dan mudah dimengerti, sudah biasa dipakai dan dikenal umum. Kemudian disusun menurut kaidah-kaidah tata bahasa yang sudah dibakukan.

(4). Berupaya agar tulisan ilmiah yang dibuat nampak menarik, enak dibaca, meskipun tidak harus "nyaman" untuk dibaca.

Tulisan ilmiah harus ditulis dengan teknik dan gaya yang mempunyai ciri-ciri khas. Oleh karenanya diajurkan bagi penulis pemula agar mengembangkan gaya tulisannya sendiri-sendiri yang pada akhirnya nanti akan menjadi trade mark bagi dirinya sendiri.

3.3. Tahapan Pekerjaan Menulis

Dalam proses membuat tulisan ilmiah, beberapa tahapan harus dilakukan, yaitu:

(1) membuat rencana (planning) garis-garis besar tulisan atau out line
(2) membuat draft pertama
(3) membuat draft kedua
(4) penyusunan draft akhir atau final draft.

3.3.1. Menyusun Benang Merah (outline).

Tampaknya bagi penulis yang akan menulis artikel ilmiah, langkah awal yang harus dilakukan adalah membuat garis besar (outline) karangannya . Dengan adanya garis besar itu penulis telah memutuskan apa yang ingin disampaikan dan bagaimana tiap bagaian dihubungkan dengan bagaian yang lain secara logis. Setelah itu barulah penulis memikirkan bagaimana mengembangkan hal-hal yang telah dihubungkan itu secara lebih rinci . Dengan membuat kerangka garis besar penulis dapat melihat dengan jelas apakah semua materi telah dimasukkan ataukah ada sesuatu yang tertinggal.

Benang-merah tersebut kemudian dikembangkan dengan cara menambah sub- topik, bagian, sub bagian, dan sebagainya. Dari pengembangan outline itu, penulis juga dapat lebih mudah untuk mengetahui ada tidaknya hubungan logik antar materi yang ingin ditulis.

Setelah outline selesai disiapkan, sebaiknya dibaca ulang dan diper-iksa sekali lagi untuk melihat apakah masih ada materi yang terlewatkan. Apakah ide-ide yang telah dikelompokkan bersamasama itu benar- benar berada dalam suatu himpunan secara logis ? Apabila perlu, outline itu dapat diubah atau dirombak. Phillips dan Hunt (1982) memnyarankan langkah berikut untuk membuat outline :

1. Buatlah outline sesederhana mungkin dan aturlah topik-topik dalam urutan yang logis dan mudah dibaca.
2. Kembangkan outline itu dengan cara memberikan judul, sub-judul, bagian dan sub bagaian dari setiap bagian .
3. Kemudian kembangkanlah outline itu lebih lanjut dengan mengadakan pengaturan kembali topik-topik yang ingin dianalisis dalam pengaturan yang lebih efektif dan rasional.

Outline yang tersusun pada umumnya mengikuti urutan seperti yang akan diuraikan dalam bab berikutnya dalam topik "menulis tulisan ilmiah", hanya untuk "abstrak/ ringkasan" harus disusun paling akhir. Urutan itu adalah sebagai berikut :

(1) Judul (Apakah sudah sesuai dengan apa yang akan ditulis ?)

(2) Pendahuluan (mengapa penelitian dilakukan ?, apasaja yang sudah diketahui dan apa saja yang belum diketahui sehubungan dengan topik penelitian?).
(3) Material (apa saja yang digunakan dalam penelitian dan bagaimana cara memakainya ?)
(4) Metode penelitian (apa saja yang digunakan ? dan bagaimana prosedurnya?)
(5) Hasil (apa yang ditemukan ?, apakah validitas bisa dipercaya ?)
(6) Pembahasan (apa arti dan kepentingan hasil yang diperoleh ? adakah hubungannya dengan yang lain ?)
(7) Daftar pustaka (pustaka apa yang digunakan ?)
(8) Abstrak .

3.3.2. Draft Pertama

Apabila outline sudah selesai disiapkan, penulisan draft pertama dapat dimulai secara sistematis, diselesaikan tahap demi tahap dengan mencoba menjawab pertanyaan yang telah diterangkan di bagian sebelum-nya .

Pada tahap ini penulis pemula belum perlu terlalu menekankan kepada gaya bahasa yang digunakan. Tentu saja tidak ada salahnya sudah menuliskannya dengan gaya yang dikehendaki oleh majalah ilmiah tetapi jangan sampai hal-hal itu menjadi penghambat kemajuan penulisan.

Faktor kunci dalam pembuatan draft pertama adalah penulis sedang membangun tempat berdiri. Dua puluh kalimat yang bahasanya kurang baik tetapi menyebabkan penulis dapat terus menulis akan jauh lebih menguntungkan dari pada satu kalimat tersusun baik tapi melelahkan. Apabila gagasan dibiarkan bebas mengalir maka penulisannyapun akan demikian pula, cacat dalam kalimat yang dapat diperbaiki kemudian, dapat ditutupi dengan kalimat lain.

3.3.3. Draft ke dua

Setelah penulisan draft pertama selesai, karangan telah berbentuk dengan bagian yang terpisah-pisah sesuai dengan outline. Biasanya tiap-tiap bagian tidak bersambung dengan bagian lain sebagaimana mestinya.

Sampai sejauh ini, semua hal pokok telah tercatat dan penulis dapat mencoba memahami keseluruhan struktur karangan dengan membacanya secara cepat dari awal sampai akhir. Cara ini disebut uji kelancaran "aliran pikiran" (flow of thoughts). Pada tahap ini jika sampai pada bagian yang mengganggu, atau pengulangan, ataupun salah, jangan berhenti untuk memperbaikinya. Buatlah catatan pada ruang kosong kertas draft dan teruskan membaca. Setelah selesai membaca maka dapat kembali lagi pada bagian-bagian yang tidak tersusun dengan baik. Selama uji kelancaran ini mungkin akan dapat diketahui kalimat- kalimat yang berbelit-belit atau terlalu panjang.

Pengulangan atau duplikasi yang tidak perlu harus dicari dan dihilangkan. Pengulangan sering dijumpai didalam "Penda huluan" dan

"Pembahasan" , serta dalam "Hasil" dan "Pemba hasan". Hal-hal yang telag dikemukakan dalam "Pendahuluan" seringkali dikemukakan kembali dalam "Pembahasan". Apabila ini terjadi maka "Pembahasan" harus diubah sehungga pembaca dapat mengingat argumen yang tercantum dalam "Pendahuluan" tanpa perlu membacanya lagi

Untuk mengatasi "Hasil" diulang dalam "Pembahasan" dapat dilakukan dengan cara mengacu pada tabel dan gambar, bukan dengan cara mengulangi teksnya. Kalau cara yang dilakukan inipun belum mendapatkan jalan keluar, maka penulis harus merenungkan kembali bagaimana menyusun "Hasil" yang lebih baik, dan penyajiannya dalam naskah perlu disusun kembali.

Setelah draft pertama selesai dan dilanjutkan dengan draft kedua yang telah dikoreksi maka terbentuklah naskah yang secara keseluruhan telah tersusun dengan pokok-pokok pikiran yang menyatu dan mengalir, meskipun demikian masih perlu dikaji lebih lanjut.y

3.3.5. Draft akhir (final draft)

Draft akhir dihasilkan setelah draft ke tiga sudah diperbaiki dan penekanannya ditujukan terutama kepada penyuntingan (editing) untuk memenuhi permintaan editor atau supervisor.

Tugas berikutnya adalah pemeriksaan tulisan untuk menjamin tidak adanya kesalahan karena kecerobohan. Bersamaan dengan pemeriksaan naskah akhir, data asli perlu diperiksa kembali untuk meyakinkan bahwa semua angka yang dikutip telah bertalian dengan tabel atau gambarnya, serta nomor tabel maupun gambar sudah sesuai dengan yang diacu dalam naskah.

Perlu disampaikan pada peneliti bahwa "editor" atau supervisor tidak segan-segan mengembalikan naskah karena kesalahan yang kecil akibat kecerobohan.

BAB IV
KARYA TULIS ILMIAH : ARTIKEL JURNAL ILMIAH

Karya tulis ilmiah dapat didefinisikan sebagai bentuk karangan atau tulisan yang berupa buku, artikel dalam buku atau journal, skripsi, thesis, desertasi (termasuk proposal penelitiannya) dan laporan hasil penelitian, yang disajikan secara sistematis, cermat, tidak emotif, tidak persuasif, kata-katanya mudah diidentifikasi, tidak argumentatif, tulus, tidak mengejar kepentingan pribadi, dan semata-mata untuk memberikan informasi.

Artikel jurnal ilmiah atau karya tulis ilmiah yang dipublikasi biasanya terdiri atas:

(1) Judul .
(2) Penulis .
(3) Abstrak (abstract) yang kadang-kadang disertai dengan kata-kata kunci (key words).
(4) Pendahuluan .
(5) Bahan dan Metoda; atau Metodologi Penelitian
(6) Hasil Penelitian .
(7) Pembahasan .
(8) Kesimpulan dan Saran .
(9) Daftar Pustaka .

4.1. Judul (title)

"The title (and abstract) of any article permit potential readers to get a quick overview of study and to decide if they wish to read the article itself. Title (and abstract) are also indexed and compiled in reference works and computerized databases. For this reason they should accurately reflect the content of the article and include key words that will ensure their retrieval from a database. Researcher should compose the title (and abstract) after they have completed the article and have a firm view of its structure and content. The recommended length for a title is usually 10 to 12 words. It should be fully explanatory when standing alone and identify the theoretical issues or the variables under investigation". (Bem, 2003)

Tujuan utama menulis tulisan ilmiah adalah supaya karangan itu dibaca oleh orang lain. Sebelum pembaca beralih membaca isi tulisan, yang pertama kali dibaca adalah judulnya. Judul artikel diharapkan mencerminkan dengan tepat masalah yang dibahas dalam artikel. Oleh karena itu pilihan kata-kata harus tepat, mengandung unsur-unsur utama yang dibahas, jelas, dan setelah disusun dalam bentuk judul harus memiliki daya tarik yang cukup kuat bagi pembaca. Judul artikel hasil penelitian harus menggambarkan keterkaitan variabel yang digunakan dalam penelitian,

walaupun tidak harus sepanjang judul penelitian yang sebenarnya. Judul artikel (bahasa Indonesia) hasil penelitian lazimnya berkisar 10-12 kata

Di bawah ini ciri-ciri judul beberapa jenis tulisan yang sifatnya umum.

Jenis tulisan	Ciri-ciri judulnya
1. Buku bukan ilmiah	Panjang dan sering tidak menimbulkan pengertian tentang isinya (tidak informatif).
2. Buku ilmu pengetahuan eksakta	Pendek; ringkas; tidak mementingkan kelengkapan; tetapi informatif.
3. Buku ilmu pengetahuan sosial	Ringkas; lengkap; mementingkan informasi; sependek mungkin.
4. Artikel majalah ilmu dan pengetahuan	Informatif; ringkas; lengkap sependek mungkin; mementingkan pemberian informasi.

Dalam perumusan judul harus dicoba disajikan fakta dan juga harus lebih ditonjolkan dalam jajaran judul lain dalam jurnal itu. Formulasi judul sebaiknya positif, ringkas, dan dapat memberikan petunjuk tentang isi serta penekanan-penekanan yang diberikan di dalam penelitian. Judul yang baik tersusun dari kata-kata kunci yang menunjukan gatra-gatra (aspek) utama isi karangan yang dirangkaikan dengan kata-kata penghubung yang tepat. Judul tidak perlu merupakan suatu kalimat atau headline. Pada judul sebaiknya dihindarkan kata-kata kerja (apabila ditulis dalama bahasa asing).

Dalam era informasi dan komunikasi modern seperti sekarang ini, pelayanan penelusuran pustaka (*literature scanning service*) telah banyak menggunakan sistem kata kunci sehingga perlu dilakukan penyaringan kata-kata kunci dari seluruhnya tulisan dan memasukannya dalam judul. Cara ini mempunyai dua keuntungan : pertama, akan mendapatkan judul judul yanga paling deskriptif, dan kedua akan menjamin bahwa pelayanan pemayaran dapat menggolongkan karangan itu ke dalam klasifikasi (indeks) yang benar.

Ciri-ciri Judul :

sebagai solusi masalah
mencerminkan sikap penulis
terdapat *action* (kata pencermin tindakan)
terdiri dari 10 s/d 15 kata
hanya mempunyai satu arti
tidak memihak (tanpa iklan)
tidak diberi titik
ditulis huruf kapital semua, kecuali standar int'L, kg
menarik pembaca untuk diikuti.

Beberapa teladan judul penelitian adalah berikut ini:

A. Dalam Jurnal Agrivita:

1. Perencanaan Pola Tanam di daerah Irigasi Induk Saluran Molek Kecamatan Kepanjen Kabupaten Malang
2. Pengaruh Berat dan Warna Benih terhadap Pertumbuhan dan Produksi Sawi (*Brassica juncea* L.)
3. Effects of Nitrogen Application and Cowpea Intercrops on Sweet Potato Yield at Alluvial Soil
4. Lime Requirement and its Effects on Chemical Properties of Indonesian Acid Mineral Soils
5. Improving the Productivity of Soil in the Swampy Area in Kabupaten Luwu through Fertilization

B. Dalam Soil Science Society of American Journal:

1. Flow Patterns During Extended Saturated Flow in Two, Undisturbed Swelling Clay Soils with Different Macro-structures
2. Denitrification Rates in Relation to Total and Extractable Soil Carbon
3. Ammonium Diffusion as a Factor in Nitrogen Loss from Flooded Soils
4. Model for the Release of Urea by Granules of Sulfur-Coated Urea Applied to Soil
5. Effects of Drying and Air-Dry Storage of Soils on Their Capacity for Denitrification of Nitrate

4.2. Penulis (Author)

Pakar yang harus dicantumkan sebagai penulis hanyalah yang benar-benar berperan-serta dalam terciptanya karya ilmiah itu. Pencatuman nama pimpinan sebagai supervisor tidak perlu. Nama penulis seringkali diikuti keterangan mengenai jabatan dan nama lembaga tempat penulis bekerja.

Nama penulis artikel ditulis tanpa disetai gelar akademik atau gelar apapun. Nama lengkap dengan gelar akademik boleh ditulis di sebelah bawah halaman pertama artikel. Nama lembaga tempat bekerja penulis juga dapat ditulis sebagai catatan kaki di halaman pertama. Jika lebih dari tiga penulis, kadangkala hanya nama penulis utama saja yang dicantumkan di bawah judul; nama penulis lain dapat ditulis dalam catatan kaki.

4.3. Abstrak

An abstract summarizes, in one paragraph (usually), the major aspects of the entire paper in the following prescribed sequence:

1. *The question(s) you investigated (or purpose):*
   State the purpose very clearly in the first or second sentence.

2. The experimental design and methods used:
Clearly express the basic design of the study.
Name or briefly describe the basic methodology used without going into excessive detail-be sure to indicate the key techniques used.

3. The major findings including key quantitative results, or trends:
Report those results which answer the questions you were asking
Identify trends, relative change or differences, etc.

4. A brief summary of your interpetations and conclusions:
Clearly state the implications of the answers your results gave you.

The abstract of an empirical article should not exceed 120 words. It should contain the problem under investigation (in one sentence if possible); the participants, specifying pertinent characteristics, such as number, type, age, sex, and species; the experimental method, including the apparatus, data-gathering procedures, and complete test names; the findings, including statistical significance levels; and the conclusion and the implications or applications.

Abstrak lazimnya memuat masalah penelitian atau tujuan penelitian, metode penelitian, dan hasil penelitian. Abstrak dapat terdiri dari rangkaian kata-kata yang disusun dalam satu paragraf, dengan format *esei* bukan *enumeratif*. Abstrak diketik dengan spasi tunggal dan dengan format yang lebih sempit dari teks utama (margin kanan dan kiri dapat menjorok masuk beberapa ketukan).

Abstrak hendaknya disertai dengan 3-5 kata-kata kunci, yaitu istilah-istilah yang mewakili ide-ide atau konsep-konsep dasar yang dibahas dalam artikel. Kata-kata kunci lajimnya berupa kata dasar atau kata yang berdiri sendiri (tunggal) bukan frasa atau rangkaian kata. Namun untuk kasus tertentu, misalnya untuk memperoleh makna yang lebih dalam maka dimungkinkan untuk digunakan kata majemuk atau kata-kata kunci yang dibentuk oleh dua kata.

Abstrak merupakan kondensasi singkat dari isi karangan yang dapat memberikan informasi mengenai isi keseluruhan karangan. dengan membaca abstrak/ringkasan, pembaca akan mendapatkan gambaran umum mengenai hasil-hasil dan kesimpulan penelitian. Oleh karena itu abstrak/ringkasan harus ditulis secara ringkas meskipun tidak memakai bahasa telegram, yang mengorbankan kejelasan demi singkatnya. Abstrak biasanya berisi : (1) tujan penelitian, (2) metode penelitian secara ringkas, dan (3) hasil penelitian.

Abstrak ditempatkan di bagian awal artikel dan biasanya merupakan bagian yang pertama kali akan dicari oleh pembaca setelah ia tertarik dengan judul . Abstrak selain untuk memberikan gambaran umum karangan, juga dimaksudkan untuk dapat mengesankan pembaca . Dibaca atau tidaknya

seluruh karangan kan tergantung pada kesan yang diperoleh setelah membaca abstrak/ringkasannya.

Kandungan isi dan makna abstrak selalu erat kaitannya dengan judul. Abstrak sering dikutip sebagaimana adanya, seperti dalam jurnal abstrak (jurnal yang memuat abstrak dari karya tulis ilmiah) **"Tropicals Abstracts, Publikasi dari The Royal Tropical Institute"**.

Penulis dapat memberikan penekanan mengenai beberapa hal penting tanpa membuang-buang ruangan dengan cara mengulangi informasi yang telah ada dalam judul. Dalam praktek, judul dianggap sebagai kalimat pertama dan kalimat-kalimat Abstrak dimulai dari dan mendukung judul tsb.

Abstrak harus ringkas dan jelas. Apabila Abstrak terlau panjang, redaktur majalah atau pelayanan peng-abstrak-an **"(abstracting services)"** mungkin akan menyingkatnya tanpa menghiraukan permasalahan rincinya sehingga mungkin akan mengacaukan pengertiannya. Meskipun tidak ada batas yang pasti mengenai panjang Abstrak, sebaiknya tidak lebih dari 150 kata yang diketik satu spasi dalam Bahasa Indonesia dan Bahasa Inggris. Karena Abstrak bukan merupakan bagian integral karangan, maka Abstrak harus bersifat mandiri dalam menyajikan informasi. Informasi penting yang menyangkut perbedaan, cara atau jumlah sebaiknya disebutkan dengan tepat. Dengan alasan yang sama, singkatan sebaiknya tidak digunakan, kecuali singkatan yang diungkapkan berkali-kali dalam Abstrak itu. Hasil yang diringkas adalah hasil yang asli sehingga acuan tidak diperlukan dalam Abstrak. Hasil dari tinjauan pustaka tidak perlu dituliskan.

Kandungan isi Abstrak pada dasarnya merupakan jawaban atas pertanyaan-pertanyaan: mengapa kegiatan (penelitian) itu dilakukan ?, Apakah yang dilakukan ?; Apakah hasilnya ?; apakah makna hasil kegiatan itu ?

Biasanya di bagian akhir Abstrak juga dituliskan kata-kata kunci (*keywords*) yaitu kata-kata kunci dari karangan itu. Selain itu, seringkali Abstrak ada yang dilengkapi dengan kata-kata kunci tambahan (*additional key words*) yaitu kata-kata kunci yang ada di dalam laporan lengkap tetapi yang tidak terdapat didalam karangan (artikel) itu.

Ciri-ciri Kata kunci :

khasnya judul
kata spesifik action judul
kata yang sering muncul
bisa berupa ungkapan selain kata
terdiri dari dua bahasa, keywords dengan bahasa Inggris
terdiri dari 3 s/d 5 kata.

Tergantung cara penyajiannya, Abstrak dapat dibedakan menjadi dua tipe, yaitu :

(1). Abstrak yang indikatif, bila penyajiannya terutama di tujukan supaya pembaca dapat menetukan sikap perlu tidaknya membaca laporan asli yang lengkap,

(2). Abstrak yang informatif, bila ditekankan kepada pem-berian informasi mengenai data pokok dan kesimpulan yang oleh penulis dianggap sangat diperlukan oleh para pembacanya.

Beberapa teladan abstrak adalah berikut ini:

1. Dalam Tropical Abstracts:

Singh, I.J., and Singh, P.P. Response of some sugar cane varieties to nitrogen application in North India. Int. Sugar J. 72, 858, p. 167-9 (1970).

Fertilizing of 3 sugar-cane varieties, commonly grown in N. India, was studied to determine: (1) the response to various levels of N application; (2) the most profitable level of N application for all 3 varieties; and (3) total revenue, total cost and net profit, resulting from N application. Maximum production response was achieved with 200, 225, and 250 kg N/ha for Co 1148, Co 1305 and Bo 32, respectively. The most profitable N levels were 185, 208, and 186 kg, respectively; in this case, the net profits were US $290, 329, and 158, respectively.

2. Dalam Australian Journal of Soil Research:

McArthur, W.M. and W.G.R. Russell. Soil Morphological Properties in Relation to Depth to the Groundwater Table in a Sandy Landscape near Perth. Aust. J. Soil Res., 1978, 16, 347-49.

In an area of about 500 ha, in a sandy landscape, 154 soil profiles were classified according to colour, consistence, and thickness of horizons, and the resulting six classes were shown to be associated with depth to groundwater table. Where depths were > 11 m profiles had an A_2 horizon which was organic B horizon. Also profiles having a B horizon hue of 7.5YR were associated with greater depth to water than those with hues of 10YR and 2.5Y.

3. Dalam Agrivita:

Jody Moenandir dan Ni Luh Putu Indriyani. Periode Kritis Tanaman Jagung (Zea mays L.) karena Persaingan dengan Gulma. Agrivita, Vol. 12, Januari 1989.

Penelitian lapang untuk mengetahui periode kritis tanaman jagung (Zea mays L.) karena adanya persaingan dengan gula dilaksanakan di Mulyo Agung, Dau, Malang mulai bulan Maret sampai bulan Juni 1987.
Perlakuan tanaman jagung bebas gulma dan bergulma selama 15 hari, 30 hari, 45 hari, 60 hari, 75 hari, dan sampai panen diperlakukan pada jagung Hibrida C_1, dengan menggunakan Rancangan Acak kelompok dan 3 ulangan.

Pertumbuhan dan hasil tanaman jagung Hibrida C_1 terbaik terjadi pada perlakuan bebas gulma sampai panen, dan tidak berbeda nyata dengan bebas gulma 45 hari, 60 hari dan 75 hari setelah tanam. Periode kritis tanaman jagung Hibrida C_1 karena adanya persaingan dengan gulma terjadi pada saat tanaman berumur 36 hari.

4.4. Pendahuluan

Pendahuluan merupakan bagian penting untuk memberikan gambaran yang ringkas tetapi jelas mengenai masalah dan menghadapkan pembaca pada beberapa pustaka yang relevan. Isi pendahuluan diharapkan mampu secara mulus dan tepat menuntun pembaca menuju kepada pemikiran logis yang berakhir pada pernyataan mengenai penelitian yang dilakukan dan hasil-hasil yang diharapkan. Apabila pendahuluan telah berfungsi sebagaimana mestinya, pembaca tidak akan menjadi penerima yang pasif tetapi sebaliknya akan menjadi pencari informasi yang penuh semangat dan kreatif.

The first task of the article is to introduce the background and nature of the problem being investigated.

The Opening Statements. *Here are four rules of thumb for the opening statements:*

1. *Write in English prose, not disciplinary jargon.*
2. *Do not plunge unprepared readers into the middle of your problem or theory. Take the time and space necessary to lead them up to the formal or theoretical statement of the problem step by step.*
3. *Use examples to illustrate theoretical points or to introduce unfamiliar conceptual or technical terms. The more abstract the material, the more important such examples become.*
4. *Whenever possible, try to open with a statement about people (or animals), not psychologists or their research (This rule is almost always violated. Don't use journals as a model here.)*

The Literature Review. *After making the opening statements, summarize the current state of knowledge in the area of investigation. What previous research has been done on the problem? What are the pertinent theories of the phenomenon? Although you will have familiarized yourself with the literature before you designed your own study, you may need to look upadditional references if your results raise a new aspect of the problem or lead you to recast the study in a different framework.*

Ending the Introduction. *End the introduction with a brief overview of your own study. This provides a smooth transition into the method section, which follows immediately.*

4.5. Metode Penelitian

Bagian ini merupakan bagian yang paling gamblang untuk ditulis tetapi dapat menjadi kabur apabila penulis menceriterakan terlalu banyak rincian. Hal yang penting untuk diperhatikan adalah justru bagaimana penulis mengetahui apa yang tidak perlu dicantumkan. Jadi perlu pertimbangan mana yang perlu dijelaskan (diuraikan) dan apa yang tidak perlu dicantumkan tanpa mengurangi makna dan arti tulisan.

Salah satu kriteria utama dalam penulisan metode penelitian yang baik adalah apabila peneliti lain dapat mengulangi penelitian itu setelah membaca uraian tersebut. Aplikasi teknik baru atau modifikasi lama sebaiknya diuraikan dengan lengkap, ringkas, dan tepat. Jika teknik ini telah (pernah) diuraikan selengkapnya, penulis cukup mengacu pada pustaka tersebut. Demikian pula dengan teknik statistik. Apabila teknik itu telah dijelaskan selengkapnya dalam publikasi atau buku pengajaran (texbook) tertentu maka cukup diacu saja. Analisis statistik, dan juga analisis kimia , umumnya merupakan alat bantu yang digunakan oleh para peneliti, bukan tujuan akhirnya. Namun demukian, apabila penulis melakukan proses derivasi matematika maka perlu dijelaskan meskipun meskipun satu atau dua acuan dapat meringankan tugas penulis.

This section is variously called Methods or Methods and Materials.

Function: This section explains *clearly* how you carried out your study in the following *general* structure and organization (details follow below):

- the the organism(s) studied (plant, animal, human, etc.) and their pre-experiment handling and care, and when and where the study was carried out (*only* if location and time are important factors); note that the term "subject" is used ONLY for human studies.
- if a field study, a description of the study site, including the significant physical and biological features, and precise location (latitude and longitude, map, etc);
- the experimental OR sampling design (i.e., how the experiment or study was structured. For example, controls, treatments, the variable(s) measured, how many samples were collected, replication, etc.);
- the protocol for collecting data, i.e., how the experimental procedures were carried out, and,
- how the data were analyzed (qualitiative analyses and/or statistical procedures used).

Organize presentation so any reader will understand the logical flow of the research; sub-headings work well for this purpose. Each experiment or procedure should be presented as a unit, even if it was broken up over time. The experimental design and procedure are sometimes most efficiently presented as an integrated unit, because otherwise it would be difficult to split them up. In general, provide enough quantitative detail (how much, how long, when, etc.) about your experimental protocol such that other scientists could reproduce your experiments. You should also indicate the statistical procedures used to

analyze your results, including the probability level at which you determined significance (usually at 0.05 probability).

Style: The style in this section should read as if you were verbally describing the conduct of the experiment. You may use the active voice to a certain extent, although this section requires more use of third person, passive constructions than others. Avoid use of the first person in this section. Remember to use the past tense throughout - the work being reported is done, and was performed in the past, not the future. The Methods section *is not* a step-by-step, directive, protocol as you might see in your lab manual.

4.6. Hasil Penelitian (Results)

Remember that the Results section has both text and illustrative materials (Tables and Figures). Use the text component to guide the reader through your key results, i.e., those results which answer the question(s) you investigated. Each Table and Figure must be referenced in the text portion of the results, and you must tell the reader what the key result(s) is that each Table or Figure conveys.

Bab mengenai "Hasil Penelitian" bertujuan untuk mengemukakan hasil penelitian. Secara umum bagian ini berisi penemuan-penemuan penelitian, penjelasan serta penafsiran data, dan hubungan data yang diperoleh. Menulis "hasil" harus jelas supaya pembaca tidak mengira penulis telah menyembunyikan sesuatu atau mengira bagian tersebut terlewat pada waktu pertama kali membaca.

Informasi dan data yang rumit sebaiknya disajikan tidak berupa uraian verbal. Tabel, gambar, foto, dan grafik sering dapat memberikan keterangan yang lebih jelas daripada jajaran kata-kata. Walaupun demikian , masih diperlukan uraian yang memadai untuk menjelaskan gambar tersebut. Suatu kaidah yang berguna adalah bahwa uraian dapat mempunyai arti tanpa adanya tabel atau grafik, dan sebaliknya data yang sama dengan tabel atau grafik. Dalam uraian, perhatian lebih diberikan pada ba-gian-bagian yang dianggap penting dari tabel atau grafik. Uraian (narasi) digunakan untuk menekankan segi-segi penting dari tabel atau grafik apabila nanti sampai pada Pembahasan.

Gambar dan grafik sering memberikan pengaruh lebih kuat dari pada tabel, terutama apabila menjelaskan perubahan bersinambung yang berasosiasi dengan masukan (input) pelakuan yang bersinambung pula. Grafik biasanya lebih mudah dicerna dari pada sekelompok bilangan, sebaliknya grafik kurang memberikan ketelitian . Apabila tujuannya hanya akan menunjukan kecenderungan dan perubahan secara kasar, lebih baik menggunakan gambar. Apabila pengujian hipotesis memerlukan analisis hasil yang teliti maka tabel yang menyajikan angka-angka pasti merupakan bentuk yang lebih tepat. Pilihan mengenai bentuk penyajian data tergantung pada pertimbangan : manakah bentuk (grafik, tabel, histogram, gambar, atau

cara lain) yang akan memberikan kesan paling kuat. Banyak majalah ilmiah yang membatasi penyampaian data berupa potret, terutama potret berwarna, karena alasan beaya cetak yang mahal.

> ***What are the "results"?:*** *When you pose a testable hypothesis that can be answered experimentally, or ask a question that can be answered by collecting samples, you accumulate observations about those organisms or phenomena. Those observations are then analyzed to yield an answer to the question. In general, the answer is the " key result".*

Presenting the Findings (Bem, 2003).

The general rule in reporting research findings is to give the forest first and then the trees. This is true of the results section as a whole: Begin with the central findings, and then move to more peripheral ones. It is also true within subsections: State the basic finding first, and then elaborate or qualify it as necessary. Similarly, discuss an overall measure of aggression or whatever first, and then move to its individual components. Beginning with one of your most central results, proceed as follows:

1. *Remind us of the conceptual hypothesis or the research question you are asking: "It will be recalled that the men are expected to be more emotionally expressive than the women." Or, "We ask, first, whether the men or the women are more emotionally expressive?" Note that this is a conceptual statement of the hypothesis or research question.*
2. *Remind us of the operations performed and behaviors measured: "In particular, the men should produce more tears during the showing of the film than the women." Or, "Do the men produce more tears during the showing of the film than the women?" Note that this is an operational statement of the hypothesis or research question.*
3. *Tell us the answer immediately:*
   "The answer is yes." Or, "As Table 1 reveals, men do, in fact, cry more profusely than the women."
4. *Now, and only now, speak to us in numbers. (Your grandmother can now skip to the next result in case she has forgotten her statistics or her reading glasses.): "Thus the men in all four conditions produced an average of 1.4 cc more tears than the women, $F(1,112) = 5.79$, $p < .025$."*
5. *Now you may elaborate or qualify the overall conclusion if necessary: "Only in the father-watching condition did the men fail to produce more tears than the women, but a specific test of this effect failed to reach significance, $t = 1.58$, $p < .12$."*
6. *End each section of the results with a summary of where things stand: "Thus, except for the father-watching condition, which will be discussed below, the hypothesis that men cry more than women*

in response to visuallydepicted grief appears to receive strong support."

7. *Lead into the next section of the results with a smooth transition sentence: "Men may thus be more expressive than women in the domain of negative emotion, but are they more expressive in the domain of positive emotion? Table 2 shows they are not..." (Again, the "bottom line" is given immediately.) As the results section proceeds, continue to summarize and "update" the reader's store of information frequently. The reader should not have to keep looking back to retrieve the major points of your plot line.*

By structuring the results section in this way, by moving from forest to trees, by announcing each result clearly in prose before wading into numbers and statistics, and by summarizing frequently, you permit a reader to decide just how much detail he or she wants to pursue at each juncture and to skip ahead to the next main point whenever that seems desirable.

Figures and Tables.

Unless a set of findings can be stated in one or two numbers, results that are sufficiently important to be stressed should be accompanied by a figure or table summarizing the relevant data. The basic rule of presentation is that a reader be able to grasp your major findings either by reading the text or by looking at the figures and tables. Thus, figures and tables must be titled and labeled clearly and completely, even if that means constructing a lengthy title or heading . For detailed information on figures and tables, see the Publication Manual (APA, 2001).

On Statistics.

As you know, every comparison between groups or relationship between variables should be accompanied by its level of statistical significance. Otherwise, readers have no way of knowing whether the findings could have emerged by chance. But despite the importance of inferential statistics, they are not the heart of your narrative and should be subordinated to the descriptive results. Whenever possible, state a result first and then give its statistical significance, but in no case should you ever give the statistical test alone without interpreting it substantively.

If your experiment used an analysis of variance design, your data analysis will automatically display the effects of several independent variables on a single dependent variable. If this organization is consonant with a smooth presentation of your results, lucky you. Go with it. But do not be a prisoner of ANOVA! If the narrative flows more smoothly by discussing the effects of a single independent variable on several conceptually related dependent variables, tear your ANOVA results apart and reorganize them. Statistical designs

are all right in their place, but you—and your prose—are master; they are slave.

> *After you have presented your quantitative results, it is often useful to become more informal and briefly to describe the behavior of particular individuals in your study. Again, the point is not to prove something, but to add richness to your findings.*

4.7. Pembahasan

> **Interpretation of results includes discussing how results modify and fit in with what we previously understood about the problem. Review the literature again at this time. After completing the experiments you will have much greater insight into the subject, and by going through some of the literature again, information that seemed trivial before, or was overlooked, may tie something together and therefore prove very important to your own interpretation. Be sure to cite the works that you refer to.**

Seringkali dalam artikel ilmiah, pembahasan merupakan kependekan dari pembahasan hasil penelitian. Bagian ini bukan merupakan ulasan dari banyak pustaka di sekitar pokok penelitian tetapi lebih menekankan penafsiran dan ulasan dari penulis . Apabila harus menggunakan kutipan, semua kutipan pustaka harus berfungsi mendukung pendapat-pendapat penulis mengenai hasil penelitian itu.

Meskipun suatu penelitian sangat sederhana , hasil harus ditafsirkan. Pembaca yang sudah mengikuti uraian sejauh itu tentu menantikan penafsiran penulis. Apabila pengantar dan hasil telah ditulis dengan sebaik-baiknya maka pembaca mungkin sudah membuat penafsiran sendiri. Sebaliknya apabila uraian yang dibuat telah membingungkan pembaca maka penulis harus memaksa mereka untuk mengalihkan perhatian kepada cara-cara yang sesuai dengan pandangan penulis . Hal ini disampaikan di dalam pembahasan .

Pembahasan disusun dengan berpedoman pada hipotesis dan tujuan penelitian. Harapan-harapan dalam hipotesis harus disesuaikan dengan hasil-hasil pokok penelitian. Penyusunan pembahasan yang dimulai dari argumen-argumen (pendapat) sudah dapat dikembangkan selama mengumpulkan, mengolah, atau mentabulasikan data. Dalam hal itu pembahasan tersusun dari kumpulan argumen dalam hal gayut, kegunaan, dan kemungkinan atau keterbatasan mengenai penelitian serta hasilnya.

Selanjutnya argumen-argumen itu dikembangkan dan diseimbangkan. Seperti telah dikemukakan diatas, pembahasan juga harus disajikan secara ringkas. Pembahasan yang panjang banyak yang disebabkan oleh penggunaan pustaka dan kalimat-kalimat yang tidak bersinambung atau tidak mengena sehingga penyampaian argumen menjadi berputar-putar dan bertele-tele serta berkepanjangan tidak menentu arah.

Selain akan mengaburkan pendapat pokoknya, pembahasan yang panjang juga membosankan. Dalam kenyataanya, sering terjadi bagan Hasil Penelitian perlu dimodifikasi pada waktu rincian pembahasan sedang dikerjakan. Penyesuaian bolak-balik ini mungkin menyangkut perubahan tabel menjadi gambar, atau sebaliknya, agar lebih terlihat kecenderungan yang ingin ditekankan. Penyesuaian dapat berupa pembuangan data yang kurang berarti dari tabel sehingga lainnya dapat digunakan dalam pembahasan.

Dalam pembahasan dapat digunakan kutipan untuk mendukung suatu pernyataan. Setiap pernyataan di dalam pembahsan harus didukung oleh hasil penelitian sendiri, hasil penelitian orang lain, atau pernyataan bersifat otoritas dari hasil penelitian orang lain.Pembaca yang ingin menikuti argumen penulis dengan seksama harus mampu menemukan dengan tepat apa yang dicarinya dalam makalah asli sesuai dengan pengarahan penulis.

Beberapa majalah ilmiah menganut kebiasaan menam bahkan sedikit pembahasan dalam hasil sehingga bagian itu berubah menjadi Hasil dan Pembahasan. Alasan yang dikemu kakan mengapa dilakukan pencampuran Hasil dan Pembahasan adalh untuk dapat mempersingkat karangan.

Bagian Isi suatu artikel ilmiah, bviasanya berkembang menjadi (a) metode penelitian, (b) hasil penelitian, dan (c) pembahasan. Metode penelitian memuat tentang rancangan penelitian, populasi dan sampel, uraian singkat operasionalisasi variabel, dan teknik analisis. Hasil penelitian memuat tentang hasil akhir dari proses kerja teknik analisis data, bentuk akhir bagian ini adalah berupa angka, gambar, dan tabel. Sedang pembahasan memuat abtraksi peneliti setelah mengkaji hasil penelitian dan teori-teori yang sudah ada dan dijadikan dasar penelitian.

Bem (2003): the discussion section

The discussion section can either be combined with the results section or appear separately. In either case, it forms a cohesive narrative with the introduction, and you should expect to move materials back and forth between these two sections as you rewrite and reshape the report. Topics that are central to your story will appear in the introduction and probably again in the discussion. More peripheral topics may not be brought up at all until after the presentation of the results. The discussion is also the bottom of the hourglass-shaped format and thus proceeds from specific matters about your study to more general concerns (about methodological strategies, for example) to the broadest generalizations you wish to make. The sequence of topics is often the mirror image of the sequence in the introduction.

Begin the discussion by telling us what you have learned from the study. Open with a clear statement on the support or nonsupport of the hypotheses or the answers to the questions you first raised in the introduction. But do not simply reformulate and repeat points already summarized in the results section. Each new statement should

contribute something new to the reader's understanding of the problem. What inferences can be drawn from the findings? These inferences may be at a level quite close to the data or may involve considerable abstraction, perhaps to the level of a larger theory regarding, say, emotion or sex differences. What are the theoretical, practical, or even the political implications of the results? It is also appropriate at this point to compare your results with those reported by other investigators and to discuss possible shortcomings of your study, conditions that might limit the extent of legitimate generalization or otherwise qualify your inferences. Remind readers of the Writing the Empirical Journal Article 10 characteristics of your participant sample, the possibility that it might differ from other populations to which you might want to generalize; of specific characteristics of your methods that might have influenced the outcome; or of any other factors that might have operated to produce atypical results.

The discussion section also includes a consideration of questions that remain unanswered or that have been raised by the study itself, along with suggestions for the kinds of research that would help to answer them. In fact, suggesting additional research is probably the most common way of ending a research report.

The function of the Discussion is to interpret your results in light of <u>what was already known</u> about the subject of the investigation, and to explain our new understanding of the problem after taking your results into consideration. The Discussion will always connect to the <u>Introduction</u> by way of the research question(s) or hypotheses you posed and the literature you cited, but it does not simply repeat or rearrange the Introduction. Instead, it tells how your study has moved us forward from the place you left us at the end of the Introduction.

Fundamental questions to answer here include:

- Do your results provide answers to your testable hypotheses? If so, how do you interpret your findings?
- Do your findings agree with what others have shown? If not, do they suggest an alternative explanation or perhaps a unforseen design flaw in your experiment (or theirs?)
- Given your conclusions, what is our new understanding of the problem you investigated and outlined in the Introduction?
- If warranted, what would be the next step in your study, e.g., what experiments would you do next?

Style of discussion.

Use the active voice whenever possible in this section. Watch out for wordy phrases; be concise and make your points clearly. Use of the first person is okay, but too much use of the first person may actually distract the reader from the main points.

Approach.

Organize the Discussion to address each of the experiments or studies for which you presented results; discuss each in the same sequence as presented in the Results, providing your interpretation of what they mean in the larger context of the problem. Do not waste entire sentences restating your results; if you need to remind the reader of the result to be discussed, use "bridge sentences" that relate the result to the interpretation.

You will necessarily make reference to the findings of others in order to support your interpretations.Use sub-headings, if need be, to help organize your presentation. Be wary of mistaking the reiteration of a result for an interpretation, and make sure that no new results are presented here that rightly belong in the results.

You must relate your work to the findings of other studies - including previous studies you may have done and those of other investigators. As stated previously, you may find crucial information in someone else's study that helps you interpret your own data, or perhaps you will be able to reinterpret others' findings in light of yours. In either case you should discuss reasons for similarities and differences between yours and others' findings.

Do not introduce new results in the Discussion.
Although you might occasionally include in this section tables and figures which help explain something you are discussing, they must not contain new data (from your study) that should have been presented earlier. They might be flow diagrams, accumulation of data from the literature, or something that shows how one type of data leads to or correlates with another, etc.

General Discussion (Jenkins, 1995):

1. Answers to the question(s) posed in the introduction together with any accompanying support, explanation and defence of the answers (present verb tense) with reference to published literature.
2. Explanations of any results that do not support the answers.
3. Indication of the originality/uniqueness of the work
4. Explanations of:
a. How the findings concur with those of others
b. Any discrepancies of the results with those of others
c. Unexpected findings
d. The limitations of the study which may affect the study validity or generalisability of the study findings.
5. Indication of the importance of the work, e.g. clinical significance
6. Recommendations for further research.

4.8. Kesimpulan

Bagian ini menyajikan kesimpulan dari penelitian bukan hanya mengulangi apa yang sudah disampaikan dalam hasil. Kesimpulan memuat ringkasan uraian, atau jawaban sistematis dari masalah yang diajukan secara singkat. Lazimnya kesimpulan diikuti oleh saran-saran atau rencana tindak

lanjut. Kesimpulan dan saran dapat disajikan dalam format *esei* atau *esei* bernomor.

> *"This section should comprise a brief statement of the major findings and implications of the study. It is not the function of this section to summarise the study; this is the purpose of the abstract. New information must not be included in the conclusions"(Jenkins, 1995).*

Pada bagian akhir dari pembahasan atau kesimpulan sering ditulis **"Ucapan Terima Kasih (Acknowledgement)"** atas ban-tuan teknis dan saran yang berharga yang diterima dari pihak lain.Penulisannya harus dilakukan dengan sederhana dan tidak berlebih-lebihan . Badan atau perorangan yang menyediakan dana untuk penelitian dan penulisan patut mendapat ucapan terima kasih. Penulis dapat menganggapnya sebagai basa-basi atau sungguh-sungguh merupakan pertolongan.

4.9. Ucapan terima kasih

> *If, in your research, you received any significant help in thinking up, designing, or carrying out the work, or received materials from someone who did you a favor by supplying them, you must acknowledge their assistance and the service or material provided. Authors always acknowledge outside reviewers of their drafts and any sources of funding that supported the research. Although usual style requirements (e.g., 1st person, objectivity) are relaxed somewhat here, Acknowledgments are always brief and never flowery. Place the Acknowledgments between the Discussion and the Literature Cited.*

4.10. Daftar Pustaka atau Daftar Acuan (References).

Daftar pustaka berisi informasi tentang sumber pustaka yang telah dirujuk dalam tubuh tulisan. Format perujukan pustaka dapat mengikuti cara *Harvard* atau cara *Vancouver*. Untuk setiap pustaka yang dirujuk dalam naskah harus muncul dalam daftar pustaka, begitu juga sebaliknya setiap pustaka yang muncul dalam daftar pustaka harus pernah dirujuk dalam tubuh tulisan.

Penulisan Daftar Pustaka Sistem *Harvard* (*author-date style*)

Sistem Harvard menggunakan nama penulis dan tahun publikasi dengan urutan pemunculan berdasarkan nama penulis secara alfabetis. Publikasi dari penulis yang sama dan dalam tahun yang sama ditulis dengan cara menambahkan huruf a, b, atau c dan seterusnya tepat di belakang tahun publikasi (baik penulisan dalam daftar pustaka maupun sitasi dalam naskah tulisan). Alamat Internet ditulis menggunakan huruf italic. Terdapat banyak varian dari sistem Harvard yang digunakan dalam berbagai jurnal di dunia.

Contoh :

Buller, H. and Hoggart, K. (1994a). 'New drugs for acute respiratory distress syndrome', *New England Journal of Medicine*, vol. 337, no. 6, pp. 435-439.

Buller, H. and Hoggart, K. (1994b). ‘The social integration of British home owners into French rural communities’, *Journal of Rural Studies*, 10, 2, 197–210.

Dower, M. (1977). ‘Planning aspects of second homes’, *in* J. T. Coppock (ed.), *Second Homes: Curse or Blessing?*, Oxford, Pergamon Press, pp.210–37.

Palmer, F. R. (1986). *Mood and Modality*, Cambridge, Cambridge University Press.

Grinspoon, L. & Bakalar, J.B. (1993). *Marijuana: the forbidden medicine*, Yale University Press, London

Contoh melakukan perujukan sumber pustaka dalam naskah tulisan :

"Smith (1983) menemukan bahwa tumbuhan pengikat N dapat diinfeksi oleh beberapa spesies *Rhizobium* yang berbeda”.

"Integrasi vertikal sistem rantai pasokan dapat menghemat total biaya distribusi antara 15% sampai 25 % (Smith 1949, Bond et al. 1955, Jones dan Green 1963)."

"Walaupun keberadaan *Rhizobium* normalnya mampu meningkatkan pertumbuhan kacang-kacangan (Nguyen 1987), namun telah didapat pula hasil yang berbeda bahkan berlawanan (Washington 1999)."

Penulisan Daftar Pustaka Sistem *Vancouver* (*author-number style*)

Sistem *Vancouver* menggunakan cara penomoran (pemberikan angka) yang berurutan untuk menunjukkan rujukan pustaka (sitasi). Dalam daftar pustaka, pemunculan sumber rujukan dilakukan secara berurut menggunakan nomor sesuai kemunculannya sebagai sitasi dalam naskah tulisan, sehingga memudahkan pembaca untuk menemukannya. Sistem ini dan variasinya banyak digunakan di bidang kedokteran dan kesehatan.

Contoh :

(1) Prabowo GJ and Priyanto E. New drugs for acute respiratory distress syndrome due to avian virus. N Ind J Med. 2005;337:435-9.

(2) Grinspoon L, Bakalar JB. Marijuana: the forbidden medicine. London: Yale University Press; 1993.

(3) Feinberg TE, Farah MJ, editors. Behavioural neurology and neuropsychology. 2nd ed. New York: McGraw-Hill; 1997.

(4) Grimes EW. A use of freeze-dried bone in Endodontics. J Endod 1994; 20: 355-6.

(5) Morse SS. Factors in the emergence of infectious disease. Emerg Infect Dis [serial online] 1995 Jan-Mar; 1(1):[24 screens]. Available from:

URL: http://www/cdc/gov/ncidoc/EID/eid.htm. Accessed December 25, 1999.

(6) Amerongen AVN, Michels LFE, Roukema PA, Veerman ECI. 1986. Ludah dan kelenjar ludah arti bagi kesehatan gigi. Rafiah Arbyono dan Sutatmi Suryo. Yogyakarta: Gadjah Mada University Press; 1992. h. 1-42.

(7) Salim S. Pengaruh humiditas dan waktu penyimpanan serta cara curing terhadap sifat fisik, kimia dan mekanik akrilik basis gigi tiruan. Disertasi. Surabaya: Pascasarjana Universitas Airlangga; 1995. h. 8-21.

Semua karangan yang diperlukan untuk dasar dan penelitian dan penulisan artikel ilmiah itu harus ditulis dengan lengkap. Daftar Acuan memuat semua pustaka yang digunakan dalam penulisan artikel ilmiah itu. Sebaliknya semua pustaka yang tertulis dalam Daftar Acuan harus benar-benar diikuti dalam teks. Daftar ini berguna untuk membantu pembaca yang ingin mencocokan kutipan-kutipan yang terdapat di dalam karangan.

Untuk karangan ilmiah dikenal tiga cara penyebutan atau penulisan sumber, yaitu dengan sistim nama dan tahun (name and year system, **Sistem *Harvard***), dengan sistem nomor urut (number system, **Sistem *Vancouver***), dan dengan catatan kaki (footnote). Masing-masing sistem akan mempengaruhi cara penulisan sumber dalam Daftar Acuan. Tiap majalah ilmiah mempunyai ketentuan-ketentuan sendiri yang harus diikuti oleh penulis dalam menuliskan Daftar Acuan. Pada umumnya dalam ilmu-ilmu yang bersifat eksakta sistem catatan kaki tidak lazim digunakan.

Daftar pustaka dapat disusun menurut Alphabetic dengan nama keluarga ditulis yang pertama. Penulisan nama pengarang Indonesia seyogyanya menurut hasil kesepakatan bersama dalam "Lokakarya Peraturan Katalogisasi dan Authority File Pengarang Indonesia" oleh Departemen P dan K tahun 1975, yang berbunyi:

> "Nama pengarang Indonesia yang terdiri dari dua unsur atau lebih, ditulis tanpa memperhatikan latar belakang masing-masing nama itu. Dalam penyusunan bibliografi nama akhir itu dicantumkan lebih dahulu, kemudian diikuti tanda koma kemudian ditulis nama pertamanya. Nama akhir itu kemungkinan dapat berupa nama keluarga, nama marga, nama ayah, nama kecil atau apapun tidak perlu diperhatikan."

Gelar kesarjanaan dan pangkat penulis tidak diperkenankan ditulis dalam daftar pustaka.

Beberapa teladan penulisan daftar pustaka adalah berikut ini:

1. Dalam Jurnal: Netherlands Journal of Agricultural Science:

Fisher, K.J., 1967. Specific ion effects of certain excess soluble salts on the growth and development of glasshouse tomatoes grown in nutrient culture. J. Hort. Sci. 42: 243-252.

Wadleigh, C.H. & L.A. Richards, 1951. Soil moisture and mineral nutrition of plants. In: E. Truog (Ed.), Mineral nutrition of plants. University of Wisconsin, Richmond, p. 411-450.

2. Jurnal Australian Journal of Agricultural Research.

Russell, J.S. (1963). Nitrogen content of wheat grain as an indication of potential yield response to nitrogen fertilizer. Aust. J. Exp. Agric. Anim. Husb. 4, 345-51.

Stewart, B.A., and Whitfield, C.J. (1965). Effects of crop residue, soil temperature, and sulfur on the growth of winter wheat. Soil Sci. Soc. Am. Proc. 29, 752-5.

3. Dalam Buku: Soils and The Environment:

Clawson, M., Landsberg, H.H., and Alexander, L.T., 1971, The agricultural potential of the Middle East: New York, American Elsevier, 312p., soil maps.

FAO, 1974, Approachs to land classification: Soil Bulletin 22: Rome, Food and Agriculture Organization of the United Nations, 120p.

4. Dalam Buku: Natural Environments:

Hamberg, D. 1971. Models of Economic Growth. New York: Harper and Row.

Shafer, E.L.,Jr., Hamilton, J.F.,Jr., and Schmidt, E.A. 1969. Natural landscape preferences: A predictive model. Journal of Leisure Research 1: 1-19.

5. Dalam Jurnal Agrivita:

Ardjasa, W.S., A. Sudirman dan A. Pane. 1977. Gulma Pada Pertanian Palawija dan Pengendaliannya. Simp. I. Peranan Hasil Penelitian Padi dan Palawija dalam Pembangunan. Maros: 1-12.

Williams, C.N., 1972. Growth and productivity of tapioca *(Manihot utilissima)* III. Crop ratio, spacing and yield. Expl. Agric. 8: 15- 23.

4.11. Lampiran

An Appendix contains information that is non-essential to understanding of the paper, but may present information that further clarifies a point without burdening the body of the presentation. An appendix is an *optional* part of the paper, and is only rarely found in published papers.

Each Appendix should be identified by a Roman numeral in sequence, e.g., Appendix I, Appendix II, etc. Each appendix should contain different material.

Beberapa contoh bahan/informasi yang dapatb disajikan dalam lampiran:

- Data mentah
- Peta-peta
- Foto – foto
- Penjelasan / penjabaran tentang rumus matematik atau statistik.
- Program komputer
- Nama-nama lengkap generik bahan atau senyawa kimia.
- Diagram atau bagan.

Gambar dan Tabel dalam Lampiran.

Figures and Tables are often found in an appendix. These should be formatted as discussed previously, but are numbered in a separate sequence from those found in the body of the paper. So, the first Figure in the appendix would be Figure 1, the first Table would be Table 1, and so forth. In situations when multiple appendices are used, the Table and Figure numbering must indicate the appendix number as well.

BAB V
TATA CARA PENULISAN

Dalam komunikasi interpersonal di dunia saintifik pada dasarnya manusia dapat menyatakan pikirannya secara lisan atau tertulis. Bagi yang ingin menyampaikan secara tertulis, yang bersangkutan harus berusaha mengikuti tata cara yang ada, dimana tata cara penulisan tersebut berbeda-beda tergantung dari jenis tulisan yang akan dibuat. Tulisan ilmiah harus memenuhi tata cara yang telah disepakati bersama, di antaranya meliputi bahasa, bahan dan ukuran, pengetikan, penomoran, daftar dan gambar, dan penulisan atau penyebutan nama.

5.1. Bahasa

Bahasa yang digunakan

Bahasa akan menimbulkan kesulitan bagi penulis apabila dalam membuat tulisan diwajibkan memakai bahasa asing seperti bahasa Inggris, Jerman, Perancis ataupun Jepang. Walaupun demikian penggunaan bahasa Indonesia (yang merupakan bahasa induk atau "***mother language***") yang sudah biasa dan dipakai dalam kehidupan sehari-hari apabila digunakan untuk mengungkapkan pokok-pokok pikiran dalam bentuk tulisan akan menjadi masalah apabila penulis kurang mengetahui kaidah-kaidah tata bahasa.

Bentuk dan Struktur Kalimat

Bentuk kalimat aktif dengan memakai kata ganti orang (saya, aku, kamu, kami dan lain-lainnya) sebagai subyek kalimat sebaiknya dihindari dan diganti dengan kalimat pasif. Struktur kalimat seyogyanya tidak terlalu panjang atau terlalu pendek sehingga mengaburkan kandungan makna dan arti yang dimaksud.

Istilah-istilah Saintifik

Dalam suatu tulisan ilmiah seringkali digunakan istilah-istilah asing, istilah yang sudah diterjemahkan ke bahasa Indonesia dan sudah dibakukan sebaiknya digunakan. Bagi istilah asing yang memang belum diterjemahkan sebaiknya tetap dipakai dan diberi garis bawah.

5.2. Material dan Ukuran.

1. Sampul dan Konsep Naskah.

Naskah tulisan jurnal ilmiah dibuat di atas kertas HVS putih dengan bobot kertas 70 - 80 g/m2. Selanjutnya diberi sampul yang terbuat dari kertas Buffalo atau yang sejenis dan diperkuat dengan karton yang dilapisi plastik tipis (*plastic sheet*).

2. Warna dan Ukuran

Pemilihan warna sampul disesuaikan dan tergantung dari ketentuan yang telah ditetapkan oleh redaksi jurnal yang dituju, dan umumnya ukuran naskah adalah 21 x 28 cm, atau ukuran kertas A4.

5.3. Cara Pengetikan

1. Jenis Huruf.

Naskah tulisan secara keseluruhan diketik rapi dengan huruf yang sama, yaitu huruf Pica (10 huruf dalam 1 inch). Penggunaan style huruf miring dan atau persegi masih diperbolehkan dengan tujuan tertentu dan di garis bawah.

Bentuk lambang, huruf Yunani ataupun tanda-tanda yang tidak dapat diketik (karena keterbatasan jumlah huruf yang ada dimesin ketik) dapat ditulis memakai tinta hitam.

2. Bilangan dan Satuan.

Bilangan diketik dengan angka dan pada bingan desimal ditandai dengan koma (untuk naskah dengan bahasa Inggris memakai titik). Satuan atau unit dinyatakan dengan singkatan resminya yang diacu dari International Unit, misalnya kg, kPa, g, bar, cal dan sebagainya.

3. Batas tepi dan Jarak baris.

Batas pengetikan diukur dari tepi kertas dan lazimnya diatur sebagai berikut:

(1) tepi atas : 4 cm
(2) tepi bawah : 3 cm
(3) tepi kiri : 4 cm
(4) tepi kanan : 3 cm.

Jarak antar baris adalah 1,5 atau 2,0 spasi, kecuali inti kutipan langsung, judul daftar, tabel maupun gambar, dan daftar pustaka yang menggunakan 1 spasi.

Pembuatan alinea baru dimulai pada ketukan ke 6 dari batas tepi kiri dan bagi awal kalimat yang menggunakan bilangan, lambang dan sebagainya harus dieja (ditulis lengkap).

4. Judul, Sub-judul dan Anak Sub-judul

Kalimat judul harus ditulis dengan huruf besar dan diatur sedemikian rupa hingga letaknya simetris. Umumnya judul diletakkan dihalaman baru, untuk itu jarak dari tepi atas adalah empat sentimeter tanpa diakhiri dengan titik.

Sub-judul adalah anak judul atau bagian dari judul, dimana ada dua pendapat yang masing-masing adalah benar.

(1) Sub-judul ditulis simetris di tengah-tengah, semua kata memakai huruf besar, kecuali kata penghubung dan kata depan, dan kesemuanya diberi garis bawah, tanpa diakhiri dengan titik. Kalimat pertama sesudah sub-judul dimulai dengan alinea baru.

(2) Sub-judul ditulis dari garis pinggir (setelah nomor urut) dan dimulai dengan huruf besar, kecuali kata penghubung dan kata depan, dan diberi garis bawah serta diakhiri dengan titik. Kalimat pertama sesudah sub-judul dimulai dengan alinea baru.

Anak sub-judul diketik dari batas kiri (setelah nomor urut) dan dimulai dengan huruf besar (yang pertama saja), diberi garis bawah dan diakhiri dengan titik. Kalimat pertama dimulai dengan alinea baru.

5. Peletakan Gambar, Tabel dan Persamaan

Naskah tulisan ilmiah biasanya juga dilengkapi dengan gambar, tabel, rumus-rumus ataupun persamaan yang peletakannya didalam naskah dibuat sedemikian rupa sehingga simetris terhadap tepi kiri dan kanan kertas.

Tabel dan gambar / bagan diusahakan dicetak dalam satu halaman . Pencetakan tabel dan gambar/bagan tidak boleh membuat halaman yang seharusnya berisi teks menjadi kosong. Nomor dan judul tabel dicetak di atas tabel dengan huruf kapital-kecil tebal. Nomor dan judul gambar/bagan dicetak di bawah gambar/bagan dengan huruf kapital-kecil tebal. Isi tabel dan gambar/bagan dicetak dengan huruf normal (tidak tebal).

6. Rincian ke bawah.

Seringkali dalam mengemukakan pendapat penulis membuat suatu uraian yang berurutan. Rincian pendapat yang berurutan ini harus disusun kebawah dan diberi nomor urut yang berupa angka atau huruf, sesuai dengan derajat perinciannya. Penggunaan garis penghubung (-) yang biasanya ditempatkan didepan kalimat yang dirinci sebaiknya dihindari dan tidak dianjurkan.

5.4. Pemberian Nomor

Dalam rangka untuk memudahkan pembaca mengikuti alur logika yang dianut penulis dan juga untuk memudahkan pencarian judul yang menarik di dalam naskah, maka penomoran halaman perlu dilakukan.

1. Nomor Halaman

Bagian awal naskah tulisan, mulai dari halaman daftar tabel sampai ucapan terima kasih diberi nomor halaman dengan angka romawi kecil. Selanjutnya mulai dari Pendahuluan (Bab I) sampai halaman terakhir, memakai angka Arab sebagai nomor halaman. Nomor halaman ini ditempatkan ditengah-tengah halaman atau ujung sebelah kanan atas. Pada

halaman yang terdapat judul, penomoran dipindah kebawah dan diletakkan ditengah-tengah atau ujung sebelah kanan bawah.

Bagi nomor yang diketik ditengah halaman, jarak dari tepi atas atau bawah adalah 1,5 cm, dan untuk nomor yang diletakkan diujung kanan atas atau bawah, jarak dari tepi kanan 3.0 cm.

2. Tabel, Gambar, Lampiran dan Persamaan

Tabel dan gambar diberi nomor urut secara konsisten dalam seluruh naskah tulisan. Penomoran ini juga dapat dilakukan untuk setiap bab tersendiri, dengan angka Arab dan didahului oleh angka Romawi yang menunjukkan pada bab keberapa tabel dan gambar itu terkait dalam naskah, sedangkan lampiran diberi nomor angka Arab.

5.5. Tabel dan Gambar

1. Tabel

Judul tabel ditulis setelah nomor dan ditempatkan simetris di atas tabel tanpa diakhiri dengan titik. Pada dasarnya tabel tidak boleh dipenggal, namun demikian apabila tabel yang dibuat terlalu panjang maka lanjutan tabel dapat diletakkan pada halaman berikutnya dengan mencantumkan nomor dan kata "lanjutan" diatasnya.

Suatu tabel biasanya terdiri dari kolom-kolom yang harus diberi nama dan pembatas yang tegas. Kalau jajaran kolom ini lebih panjang dari lebar kertas, maka bagian atas dari tabel sebaiknya di letakkan disebelah kiri kertas (dibuat melintang), sedangkan tabel yang terlalu panjang dan lebar sehingga harus dilipat sebaiknya diletakkan di lampiran.

> *Tables present lists of numbers or text in columns, each column having a title or label. Do not use a table when you wish to show a trend or a pattern of relationship between sets of values - these are better presented in a Figure. For instance, if you needed to present population sizes and sex ratios for your study organism at a series of sites, and you planned to focus on the differences among individual sites according to (say) habitat type, you would use a table. However, if you wanted to show us that sex ratio was related to population size, you would use a Figure.*

Anatomi Tabel

Table 4 (contoh saja) below shows the typical layout of a table in three sections demarcated by lines. Tables are most easily constructed using your word processor's table function or a spread sheet such as Excel. Gridlines or boxes, commonly invoked by word processors, are helpful for setting cell and column alignments, but should be eliminated from the printed version. Tables formatted with cell boundaries showing are unlikely to be permitted in a journal.

Table 4. Population variation in hatch success (mean percent) of unfertilized eggs for females from populations sampled in1997. N = number of females tested. <--Table legend

Population	mean (%)	Standard deviation	Range	N
Beaver Creek [T]	7.31	13.95	0-53.16	15
Honey Creek [T]	4.33	7.83	0-25.47	11
Rock Bridge Gans Creek [T]	5.66	13.93	0-77.86	38
Cedar Creek [P]	6.56	9.64	0-46.52	64
Grindstone Creek [P]	8.56	14.77	0-57.32	19
Jacks Fork River [P]	5.28	8.28	0-30.96	28
Meramec River [P]	5.49	10.25	0-45.76	45
Little Dixie Lake [L]	7.96	14.54	0-67.66	71
Little Prairie Lake [L]	6.86	7.84	0-32.40	36
Rocky Forks Lake [L]	3.31	4.12	0-16.14	43
Winegar Lake [L]	10.73	17.58	0-41.64	5
Whetstone Lake [L]	7.36	12.93	0-63.38	57

<--Column titles

<--Table body (data)

[T] = temporary stream, [P] = permanent streams, [L] = lakes. <--footnotes

<--Lines demarcating the different parts of the table

Table 2. Planting date, mean planting density, and total number of seed clams planted in plots at Filucy Bay and Wescott Bay in 1979.

Location	Plot code	Planting date	Mean planting density in no. clams/m^2 ± 1 st. dev.(N)	Total no. clams planted
Filucy Bay	F10 x 30	5-16-79	994 ± 39(5)	298200
	F3 x 10	5-24-79	994 ± 39(5)	29820
Wescott Bay	W10 x 25	5-16-79	994 ± 39(5)	248500
	W3 x 10	6-2-79	895 ± 35(5)[a]	26850

[a]Calculated after clams were planted based on estimated 11% mortality of seed clams between 5-24 and 6-2-79.

2. Gambar

Nomor gambar yang diikuti oleh judul dibuat sedemikian rupa sehingga simetris terhadap gambar, dan diletakkan dibawah gambar. Keterangan gambar sebaiknya diletakkan ditempat yang lowong dalam gambar. Gambar yang bentuknya memanjang sepanjang kertas (misalnya Peta), bagian atas gambar ditempatkan disebelah kiri kertas.

Figures are visual presentations of results, including graphs, diagrams, photos, drawings, schematics, maps, etc. Graphs are the most common type of figure and will be discussed in detail. Graphs show trends or patterns of relationship.

Bagaimana mengacu tabel dan gambar dari teks:

Every Figure and Table included in the paper MUST be referred to from the text. Use sentences that draw the reader's attention to the relationship or trend you wish to highlight, referring to the appropriate Figure or Table only parenthetically:

> *Germination rates were significantly higher after 24 h in running water than in controls (Fig. 4).*
> *DNA sequence homologies for the purple gene from the four congeners (Table 1) show high similarity, differing by at most 4 base pairs.*

Avoid sentences that give no information other than directing the reader to the Figure or Table:

> *Table 1 shows the summary results for male and female heights at Bates College.*

Penempatan gambar dan tabel dalam artikel:

In manuscripts (e.g. lab papers, drafts), Tables and Figures are usually put on separate pages from text material. In consideration of your readers, place each Table or Figure as near as possible to the place where you first refer to it (e.g., the next page). It is permissable to place all the illustrative material at the end of the Results section so as to avoid interrupting the flow of text. The Figures and Tables may be embedded in the text, but avoid breaking up the text into small blocks; it is better to have whole pages of text with Figures and Tables on their own pages.

Letak judul Tabel dan gambar:

- Table legends go above the body of the Table and are left justified; Tables are read from the top down.
- Figure legends go below the graph; graphs and other types of Figures are usually read from the bottom up.

Anatomi gambar

The sections below show when and how to use the four most common Figure types (bar graph, frequency histogram, XY scatterplot, XY line graph.) The final section gives examples of other, less common, types of Figures.

Parts of a Graph: *Below are example figures (typical line and bar graphs) with the various component parts labeled in italic. Refer back to*

these examples if you encounter an unfamiliar term as you read the following sections.

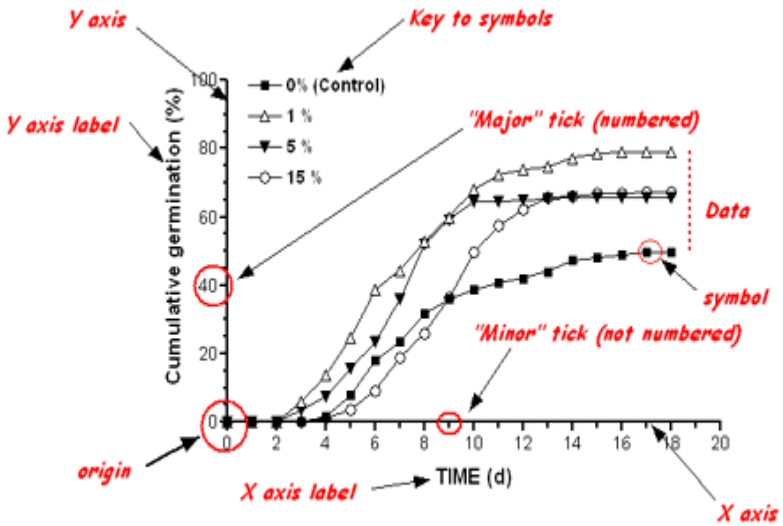

Figure 1. Cumulative germination of *Chenopodium* seeds after pregermination treatment of 2 day soak in NaCl solutions. n = 1 trial per treatment group (100 seeds/trial.)

legend

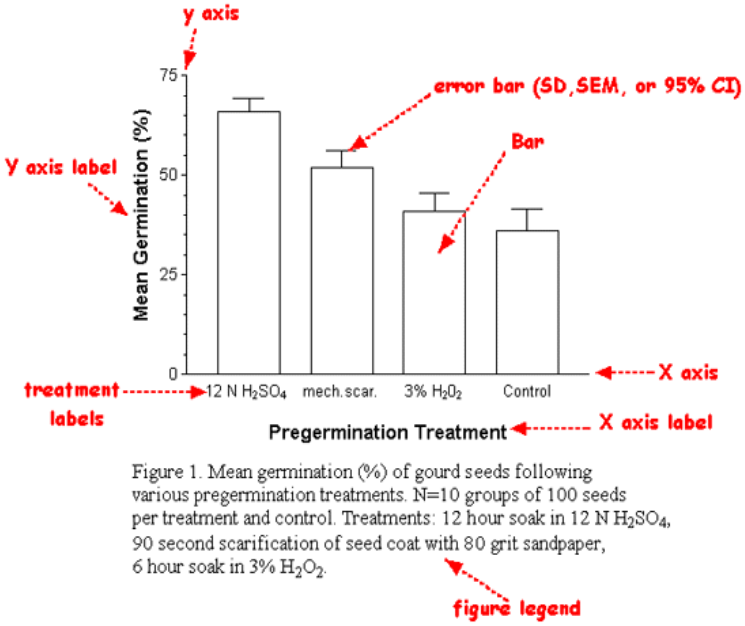

Figure 1. Mean germination (%) of gourd seeds following various pregermination treatments. N=10 groups of 100 seeds per treatment and control. Treatments: 12 hour soak in 12 N H_2SO_4, 90 second scarification of seed coat with 80 grit sandpaper, 6 hour soak in 3% H_2O_2.

figure legend

Beberapa hal penting tentang Gambar:

- Big or little? For course-related papers, a good rule of thumb is to size your figures to fill about one-half of a page. Readers should not have to reach for a magnifying glass to make out the details. Compound figures may require a full page.
- Color or no color? Most often black and white is preferred. The rationale is that if you need to photocopy or fax your paper, any information conveyed by colors will be lost to the reader. However, for a poster presentation or a talk with projected images, color can be helpful in distinguishing different data sets. Every aspect of your Figure should convey information; never use color simply because it is pretty.
- Title or no title? Never use a title for Figures included in a paper; the legend conveys all the necessary information and the title just takes up extra space. However, for posters or projected images, where people may have a harder time reading the small print of a legend, a larger font title is very helpful.
- Offset axes or not? Elect to offset the axes only when data points will be obscured by being printed over the Y axis.
- Error bars or not? Always include error bars (SD or SEM) when plotting means. In some courses you may be asked to plot other measures associated with the mean, such as confidence intervals.
- Tick marks - Use common sense when deciding on major (numbered) versus minor ticks. Major ticks should be used to reasonably break up the range of values plotted into integer values. Within the major intervals, it is

usually necessary to add minor interval ticks that further subdivide the scale into logical units (i.e., a interval that is a factor of the major tick interval). For example, when using major tick intervals of 10, minor tick intervals of 1,2, or 5 might be used, but not 4.

X,Y Scatterplot

These are plots of X,Y coordinates showing each individual's or sample's score on two variables. When plotting data this way we are usually interested in knowing whether the two variables show a "relationship", i.e. do they change in value together in a consistent way?

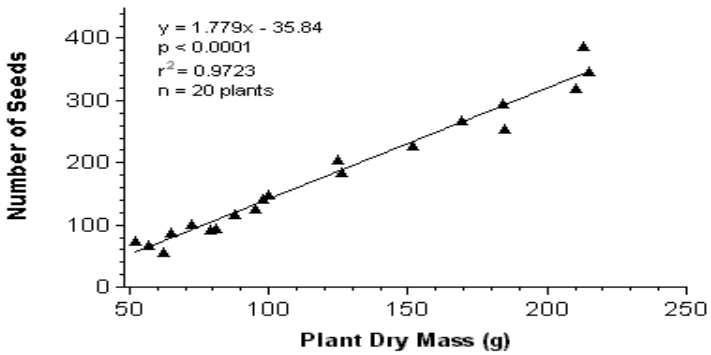

Figure 3. Seed production as a function of plant biomass in waterlilies (*Nuphar luteum*) harvested from Great Works Pond in Northern Maine in August, 2001.

Catatan untuk gambar ini:

- each axis is labeled (including units where appropriate) and includes numbered and minor ticks to allow easy determination of the values of plotted points;
- sample size is included in the legend or the body of the graph;
- if the data have been analyzed statistically and a relationship between the variables exists, it may be indicated by plotting the regression line on the graph, and by giving the equation of the regression and its statistical significance in the legend or body of the figure;
- the range of each axis has been carefully selected to maximize the spread of the points and to minimize wasted blank space where no points fall. For instance, the X axis is truncated below 50 g because no plants smaller than 52 g were measured. The ranges selected also result in labeled ticks that are easy to read (50, 100, 150…, rather than 48, 96, 144…)

X,Y Line Graph

Line graphs plot a series of related values that depict a change in Y as a function of X. Two common examples are a growth curve for an individual or population over time, and a dose-response curve showing effects of increasing doses of a drug or treatment.

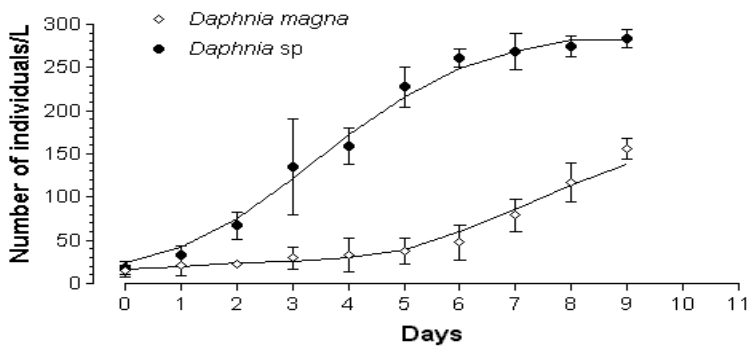

Figure 2. Mean population density (±1 standard deviation) of two species of *Daphnia* following artificial eutrophication of a small farm pond by application of organic fertilizer. Six replicate 1 L water samples were drawn from 50 cm depth at 1100 hr each day.

Catatan penting:

- a different symbol is used for each group (species), and the key to the symbols is placed in the body of the graph where space permits. Symbols are large enough to be easily recognizable in the final graph size;
- each point represents a mean value, and this is stated in the legend. Error bars are therefore plotted for each point and defined in the legend as well.
- because measurements were taken on independent groups for each species, the points are NOT connected dot-to-dot; instead a curve is fitted to the data to show the trend.

Photographs

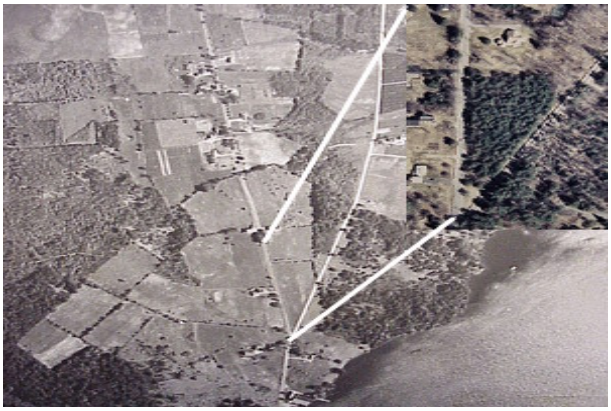

Figure 9. Aerial photo of the study site ca. 1949 and in 1998 (inset) showing the regeneration of the forest. Photos courtesy of the USDA Field Office, Auburn, Maine.

Beberapa catatan:

- A photograph is a *figure.*
- Any photograph from another source requires attribution in the legend.
- Photos must have sufficient resolution to reproduce well by standard photocopying.

5.6. Penulisan Nama

Penulisan nama dalam suatu tulisan ilmiah mencakup nama penulis yang disitir hasil karyanya, baik nama di dalam naskah maupun nama dalam daftar pustaka. Nama yang lebih dari satu suku kata, nama dengan garis penghubung, nama yang diikuti dengan singkatan dan sebagainya akan dibahas lebih lanjut dalam bab berikutnya.

5.7. Beberapa Hal Penting

Ada beberapa hal yang harus diperhatikan dalam penulisan karya ilmiah, yaitu:

1. Istilah asing dicetak miring dan dituliskan dengan benar
   misal: *base station*
   …cell sites ----------> *…cell site*
   *downlink*nya ----------> *downlink*-nya

2. Penggunaan kata ‘dimana’
misal: .....teknik dimana digunakan.....(salah)
……....teknik yang digunakan.....(benar)

pada persamaan:

x = y + z

dimana: <-- keterangan: (sebaiknya kata 'dimana' diganti dngan 'keterangan')
y= nilai asumsi
z= nilai hitungan

3. Sebaiknya tidak menggunakan kata ‘kita’,’saya’ (kata ganti orang) dalam karya ilmiah.
misal: ..... dapat kita asumsikan…(salah)
..... dapat diasumsikan…(benar)

4. Menggunakan kalimat pasif. (seperti contoh no 3 di atas)

5. Persamaan diberi nomor sesuai bab dan urutan serta tidak dicetak tebal.
misal: c = a * b (2.3)

6. Gambar, tabel, persamaan, dan pernyataan/kutipan diberi sumber acuannya.

7. Kekonsistenan dalam penulisan.
misal: ...perkembangan selular.....… (kalimat ke 2)
...seluler.....…(kalimat ke 10)

8. Tulislah kata dengan lengkap.
misalnya: & ----------> dan
yg ----------> yang

9. Singkatan diikuti kepanjangannya dan untuk kalimat berikutnya cukup singkatannya saja.
misalnya:
MU (*mobile unit*)… (kalimat ke 3)
...perawatan perangkat MU tidaklah terlalu sulit..... (kalimat ke 10)

10. Gunakan EYD
misal: bilangan 10,000 km ----------> 10.000 km
…didapat… ----------> …diperoleh…
…terdiri dari…----------> …terdiri atas…

Penggunaan huruf besar di awal kalimat.

Penempatan titik (.) dan koma (,) yang sesuai.

11. Ikuti tata cara/format penulisan karya ilmiah yang berlaku (yang dikeluarkan oleh institusi)
misalnya:
> ukuran margin
- ukuran kertas
- jenis huruf

12. Penulisan tanda baca sesuai dengan Pedoman Umum Ejaan Bahasa Indonesia yang Disempurnakan.

13. Cek penulisan sebelum diserahkan.

BAB VI
PENUTUP

Seringkali seorang penulis mendapatkan bahwa pada waktu naskah karangannya dikembalikan oleh pengulas atau editor, ia tidak mampu memperbaikinya karena ia merasa karangannya itu sudah tidak mempunyai kesalahan lagi. Ia tidak mampu mengidentifikasi kesalahan dalam karangannya. Kesulitan seorang penulis untuk menemukan kesalahan-kesalahan dalam karangannya sendiri atau selalu membuat kesalahan yang sama, pada umumnya disebabkan karena penulis itu menggunakan cara berfikir terpancang **(*conditioned thinking*)**. Cara berfikir ini adalah apabila setiap kali pikiran mengambil arah tertentu, lebih banyak kemungkinan arah pikiran itu pulalah yang akan diambil pada waktu berikutnya. Dapat dikatakan bahwa pemikiran yang terpancang itu timbul sebagaimana halnya sikap yang mewatak karena kebiasaan.

Apabila seorang penulis sudah terjebak pada pemikiran terpancang maka akan sulit sekali mengadakan perbaikan terhadap kesalahan-kesalahan yang telah dibuatnya. Pengalaman menunjukkan terdapat dua jalan utama yang dapat ditempuh untuk membebaskan cara berpikir dari pancangan ialah : (1) meninggalkan persoalan untuk sementara waktu dan (2) bertukar pikiran. Dengan meninggalkan persoalan selama beberapa hari atau minggu dan barunanti ditelaah kembali maka sebagian pemikiran yang telah dilakukan pada waktu lampau atau pemikiran yang dulu sudah menjadi kurang meyakinkan, dapat dilupakan. Dengan ddemikian, persoalan dapat dipandang dari singkapan yang baru. Selain itu, mengendapkan persoalan juga akan dapat mengundang imajinasi atau intuisi yang menyegarkan tata pikir.

Mekanisme pengkomunikasian buah pikiran merupakan bantuan yang berharga untuk menerobos garis pemikiran yang mandul, yang telah terpateri **(*fixed*)** dalam diri seseorang. Sewaktu menjelaskan suatu persoalan kepada orang lain, khususnya kepada orang yang kurang mengenal bidang yang kita asuh, rantai pemikiran yang biasa kita pakai harus diubah supaya orang lain itu lebih mudah mengikuti persoalannya. Tidak jarang terjadi, bahwa pada waktu kita menerangkan persoalan itu dengan cara lain , tiba-tiba timbul pikiran baru dalam diri kita , sekalipun orang lain yang kita ajak bertukar pikiran itu belum lagi mengucapkan sepatah katapun.

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LAMPIRAN-LAMPIRAN

Lampiran 1. Author Guidelines for Final Manuscript Preparation

Journal of Agribusiness. Department of Agricultural and Applied Economics, 314 Conner Hall, University of Georgia Athens, GA 30602-7509.

GENERAL INSTRUCTIONS:

Please provide a double-spaced copy of your final manuscript (using 1" margins, 12-point Times Roman font,
NO right-margin justification, and *NO* end-of-line hyphenation in Microsoft Word. Be sure to include your e-mail address and fax/phone numbers so that the technical editor can contact you regarding any questions. The manuscript should be sent as an attachment with your email to JABSubmit@uga.edu.

GUIDELINES FOR MANUSCRIPT COMPONENTS:

(1) Title Page:
- (a) Full title of manuscript
- (b) All author names exactly as you wish them to appear (i.e., Ryan T. Smith or R. T. Smith)
- (c) Abbreviated manuscript title to be used as running head
- (d) Author titles, affiliations, any acknowledgments, and funding source ID, if you wish to include them

(2) Abstract Page:
- (a) Full title of manuscript
- (b) Abstract (double-spaced, 12-point font), not to exceed 100 words
- (c) Key Words: Provide up to 8 key words (or short phrases), in alphabetical order

(3) Text: All text (including abstract, endnotes, references, appendices) should be double-spaced, using a 12-point Times Roman font size and 1" margins on every side.

Very Important:
- (a) Please do not use right-margin justification (since it makes it very difficult for the technical editor to intuit spacing, especially of math notations).
- (b) Do *NOT* use end-of-line hyphenation feature.
- (c) Footnotes/Endnotes: Do *NOT* use the WordPerfect (or Microsoft Word) footnote/endnote feature when preparing your text. Instead, insert superscript numbers within the text (numbering consecutively throughout the manuscript), and then prepare a full listing of your footnotes/endnotes (to be placed on a separate page immediately preceding the reference section). Do not place footnotes at the bottoms of manuscript text pages.

(4) Sequence of Manuscript Components:
- (a) Title page (unnumbered)
- (b) Abstract page (unnumbered)
- (c) Text narrative (commence page numbering of text with page 1)
- (d) Footnotes/Endnotes page
- (e) Reference section

(f) Appendix (if more than one appendix, label Appendix A, Appendix B, etc.; assign titles to all appendices)

(g) Tables (each table should be on a separate page)

(h) Figures (each figure should be on a separate page)

(5) Heading Levels: So that the technical editor can clearly identify your heading levels, please use the following format:

(a) Title = Centered, boldface, initial caps

(b) Level #1 = Flush left, boldface, initial caps

(c) Level #2 = Flush left margin, italics, initial caps

(d) Level #3 = Flush left margin, plain typeface, initial caps

(6) Math/Equations: When numbering equations, use Arabic numbers enclosed in parentheses. Equation numbers should appear at flush left margin. Number only those equations that are referred to within the text, and number them consecutively—i.e., (1), (2), (3), etc.—throughout the manuscript. The math notations/equations should be centered between the L/R margins. Use *italic* typeface for all *variables*, and use boldface (no italics) for all vectors and matrices—both within equations and within narrative.

(7) Within-Text Citations: Citations may appear parenthetically or as part of the narrative. Within the text, use parentheses ( ) rather than brackets [ ] for citations.

(a) Spell out up to 3 author last names (i.e., use "et al." only for 4 or more authors).

(b) Include the year of publication for all within-text cites. If there is more than one work by the same author(s) in the same year, please designate, for example, as 1995a, 1995b, etc. Make sure the corresponding listings in the reference section also show the "a" and "b" designations.

(c) *Very Important:* When citing a direct quotation, be sure to include the page number(s) from the author's work.

(8) Percent vs. %: Our journal style does not spell out "percent." Instead, use "%" throughout.

(9) Tables: Place each table on a separate page. For tables it is permissible to use single spacing and a smaller font size as needed. Use decimal indents, not tables with cells, to align numbers. Tables should not be integrated into your text (but all tables should be introduced within the narrative discussion by table number). Tables should be numbered consecutively (1, 2, 3, etc.) and should be placed at the end of the manuscript. Footnotes within tables should be identified by superscript alphabetical letters (a, b, c, etc.) rather than Arabic numbers. When using asterisks (*, **, ***) to denote levels of significance/probability, a single asterisk is used for the lowest level, two asterisks for the next highest, etc. For example: * = .10 level (10%), ** = .05 level (5%), *** = .01 level (1%) (10) Figures: Figures should be placed at the end of the manuscript (on unnumbered pages) immediately following tables. *Do not place figures within the manuscript text file.* Preferred (but not required) software for figure preparation is Microsoft Excel, Corel Quattro Pro, or Corel Presentations (through WordPerfect).

Regardless of the software you have used in preparing your graphics, you are requested to provide the following:

(a) *Camera-ready* (i.e., run on laser printer . . . with a minimum of 600 dots per inch resolution required) copies of your figures, each on a separate, unnumbered page. The figure title can be included on the page with your graphic; however, *make certain the figure title does NOT appear within the graphic image itself* (since the title will be typeset in our precise journal font/format in the final layout). It is helpful (but not required) if the camera-ready hard copies of your graphics are sized to fit the margin constraints of the *JAB* journal page (if we cut/paste your figures, we can avoid loss of clarity through secondgeneration photocopies that must be scaled to fit.).

If the graphic is to appear in portrait format, make sure the graphic image is no more than 4.75" wide (height may vary as needed, but should not exceed 6").
If the graphic is to appear in landscape (turned sideways on page) format, the image width should not exceed 6" and height should not exceed 4.25".

(b) *IMPORTANT:* Please submit your figure graphics with your manuscript, being sure to include spreadsheet data (i.e., the spreadsheet values used in constructing the graphic image). The spreadsheet is critical because it is frequently impossible to make even small cosmetic changes to the figure without the presence of the spreadsheet data file.

THE REFERENCE SECTION:

All citations within the manuscript must appear in the reference list . . . and all listings in the reference section must be cited somewhere within the manuscript. References should be in alphabetical order by author's last name. For clarity, *please do NOT use any abbreviations* (such as for journal names) in the references. Our journal style uses fully spelled-out journal titles.
Special notes: Do not use "et al." (either for authors or editors) in the reference list; all author (editor) names should be spelled out. Use only author/editor first and/or middle initials (we do not spell out first or middle names in reference section).

Please look at the reference samples below to format your references correctly. The most critical concern is that all reference components are present in case the technical editor needs to make adjustments. The *JAB* reference style is adapted from the *Publication Manual of the American Psychological Association* (APA). A number of sample reference citations are provided below (as generally fictitious illustrations only), showing the components needed for various types of sources.

BOOK:

Cremlyn, R. J. (1991). *Agrochemicals: Preparation and Mode of Action*, 3rd ed. Chichester, England: John Wiley and Sons.

CHAPTER IN BOOK:

Green, R. E., J. M. Davidson, and J. W. Biggar. (1980). "Methods for determining adsorption-desorption of organic chemicals: An assessment." In A. D. Banin and U. F. Kafkafi (eds.), *Agrochemicals in Soils* (pp. 273-282). Elmsford, NY: Pergamon Press.

EDITED BOOK (citing entire book rather than individual authors):

Bredahl, M. E., P. C. Abbott, and M. R. Reed, eds. (1994). *Competitiveness in International Food Markets.* Boulder, CO: Westview Press.

JOURNAL ARTICLE: (Note: *FULLY SPELL OUT* name of journal; be sure to include volume number and inclusive page numbers.) The first two examples shown below use 1985"a" and "b" designations to illustrate more than one work by same authors in same year; the third illustration shows inclusion of the journal issue number as well as volume number:

Addiscott, T. M., and R. J. Wagenet. (1985a, March). "Concepts of solute leaching in soils: A review of modeling approaches." *Journal of Soil Science* 36, 411-424.

Addiscott, T. M., and R. J. Wagenet. (1985b). "A simple method for combining soil properties that show variability." *Soil Science Society of America Journal* 49, 1365-1369.

Anderson, J. L. (1995, Winter). "The environmental revolution at twenty-five." *Rutgers Law Journal* 26(2), 395-430.

PAPERS, REPORTS, BULLETINS:

Alam, A., and S. Rajapatirana. (1993). "Trade policy reform in Latin America and the Caribbean in the 1980s." Policy Research Working Paper No. 1104, International Trade Division, The World Bank, Washington, DC.

Schatzer, R. J., M. Wickwire, and D. Tilley. (1986). "Supplemental vegetable enterprises for cow-calf and grain farmers in southeastern Oklahoma." Research Report No. T-874, Agricultural Experiment Station, Department of Agricultural Economics, Oklahoma State University, Stillwater.

PAPER PRESENTED AT MEETING:

Eginton, C., and L. Tweeten. (1982, February 12). "Impacts of national inflation on entrance and equity growth—Opportunities on typical commercial farms." Paper presented at the annual meetings of the Southern Agricultural Economics Association, Atlanta, GA.

PROCEEDINGS:

Badger, D. D. (1981). "Economics of manure management." In *Livestock Waste—A Renewable Resource: Proceedings of the Fourth International Symposium on Livestock Wastes* (pp. 275-291). Held in Amarillo, TX, July 10□13, 1980. Lubbock, TX: Texas Tech University Press.

Lampiran 2. Submission of articles

Journal of Sociology is the official journal of The Australian Sociological Association. It carries peer refereed articles of sociological research and theory on issues of interest to Australian sociology and aims to promote dialogue and exchange between Australian sociologists and the international community of sociology.

Preparation of copy

The Journal of Sociology is a peer-reviewed publication. Articles between 4000-7000 words (double spaced pages) including tables, notes and references, are accepted for review. The Editors reserve the right to return papers to authors where they exceed this word limit. Submission of a manuscript to another journal while under review by the Journal of Sociology is unethical. Breach of this principle will result in the paper being removed from consideration for publication in the JOS. Each manuscript must be accompanied by a signed statement that it has not been published previously and that it has not and will not be sent for consideration by another journal while submitted to the Journal of Sociology.

Prepare copy as follows:

1. Manuscripts should be double spaced and should not include page numbers as the SAGETRACK system will create these automatically.
2. Manuscripts should be submitted with the name and affiliation of the author as a supplementary document to preserve anonymity. Please provide the word count on the manuscript.
3. All manuscripts should be accompanied by an abstract of 100-150 words plus 5 or 6 key words.
4. Footnotes should be numbered serially, typed double-spaced, and should be listed at the end of the article or research report, and should be kept to a minimum.
5. Each table should be typed on a separate page. Insert a guideline, e.g., [Table 1 about here] at the appropriate place in the manuscript. Complex tables can present problems in the conversion from one program to another. Please key tables into the text using one tab only between columns. Do not use spaces between columns. Do not worry about the alignment of columns, but indicate on the printout how the table should appear. Key in a return at the end of a line. Do not tab to wrap.
6. For general style conventions please consult the Style Manual for Authors, Editors and Printers, Canberra: Australian Government Publishing Service, 5th Edition (revised) 1998.
7. Please provide a separate brief (no more than 50 words) autobiographical note with your contribution and ensure that a full mailing address and email address is included.

References in the text:

All references to books, articles and other sources are to be identified at an appropriate point in the text by name of author, year of publication, and

pagination (within parentheses). Footnotes are to be limited to substantive observations only. There is no need for 'ibid', 'loc cit' or 'op cit'.

For example:

1. If the author's name is in the text, follow it by the year of publication and a page reference: As Brown (1999: 267) has shown in her case study . . . . If the author's name is not in text, insert at an appropriate point surname, year of publication and page reference, for example: Australian research on changes to the middle class suggests …. (Solomon 1998: 135). Note that pagination, author and year are separated by a colon.
2. Where two authors are involved, cite both surnames. Where more than two authors are involved, cite the first surname followed by et al. For institutional authorship, supply only sufficient information for positive identification: The aim of this working paper is to explore the future of sociology in Australia (Department of Sociology, Flinders University, 1997).
3. Separate multiple citations by semicolons: The professions are the subject of considerable sociological attention (e.g., Chagnon 1994; Lorber 1992; Vassiliou 1999).
4. Where there is more than one reference in an article to the same author and year, use letters (a, b, etc.) to distinguish them one from the other. For example: (Roberts 1999a; 1999b).

Format of references:

List all items cited in the text alphabetically by author and for each author, by year of publication in an appendix titled References. List all authors by name - do not use et al. or ampersands (&). For example:

Burke, M. (2002) 'Global Boom and Bust Following the World Trade Centre Collapse', Journal of Sociology 38: 135-51.

Shaw, M. J. (2000) Life as a Graduate Student in Australian Universities. London: Sage.

Thompson, M. and J. Smith (1999) 'Gender and Wealth: Beyond the Patterns and the Paradox', pp. 156-87 in J. Montague (ed.) Wealth in Australia: Sociological Concepts and Issues, 2nd edn. Sydney: Prentice Hall.

Lampiran 3. Author Guidelines

The Journal of Management Studies is now one of the premier management journals. It represents a collection of cutting edge studies of organizational issues that most importantly are not constrained by a parochial mentality. Work published in *JMS* is an essential reference point for the conduct of excellent research by both micro and macro Organization researchers. *ChungMing Lau, Department of Management, Chinese University of Hong Kong.*

Pre-Submission English Language Editing

Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found at www.blackwellpublishing.com/bauthor /english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

Preparation of Manuscripts

Contributors should submit their manuscripts by e-mail to Jo Brudenell J.M.Brudenell@durham.ac.uk.

All manuscripts must be accompanied by a letter which indicates briefly why the article is suitable for publication in the *Journal of Management Studies* and attests that the article has not been previously published or is under review elsewhere.

All manuscripts must be prepared according to the following guidelines:

1. Manuscripts must be double-spaced throughout (this includes Notes and References) with generous margins. They should be sent in MS Word format.
2. Papers should be between 5000 and 8000 words in length. Papers should be carefully crafted and succinctly presented.
3. To permit anonymity, the author's names should not appear on the manuscript. Instead, a cover page giving the title of the article and full identifying information (name, address, telephone and fax numbers and e-mail addresses) must be attached. The title of the manuscript should be on the first page of the paper along with the abstract and keywords. Language within the text that suggests the author's identity should be avoided. In addition, the manuscript 'Properties', under 'File' in Microsoft Word, should be erased prior to submission. Any identifying information from 'Track Changes' should be removed.
4. The cover page should be followed by an informative abstract of no more than 150 words double-spaced. A list of 4-6 key words, in alphabetical order should be provided below the abstract. Key words should express the precise content of the manuscript as they are used for indexing purposes.

5. Footnotes should not be used. Endnotes should be provided on a separate page immediately following the text under the heading NOTES. Endnotes should offer significant comment, not merely cite references. They should be kept to a minimum.

6. Authors must provide high quality artwork for all illustrations. Poor definition reproductions are not suitable. Tables and figures should be numbered separately. Tables use roman numerals and figures use arabic numerals (Table I, Table II…; Figure 1, Figure 2…). Each table and figure should be given a title and should be presented on a separate page at the end of the manuscript. Figures and tables reproduced from already published work must be accompanied by permission of the original publisher (or copyright holder, if not the publisher). Please indicate the position of figures and tables in the text .

7. References should be listed alphabetically by author at the end of the manuscript.

Journal references should be listed as follows:

Child, J. and Smith, C. (1987). 'The context and process of organizational transformation - Cadbury Limited in its sector'. *Journal of Management Studies*, 24, 565-93.

Book references should be listed as follows:

Law, J. (1994). *Organizing Modernity*. Oxford: Blackwell Publishing.

Chapters in books should be listed as follows:

Wilson, M. (1996) 'Asking questions', in Sapsford, R. and Jupp, V. (Eds), *Data Collection and Analysis.* London: Sage.

Conferences proceedings should be listed as follows:

Smith, A. G. and Jones, C. H. (2002). *Presentation/Paper Title in Italics.* Conference Title, University, City.

Working papers should be listed as follows:

Jones, A. and Brown, B. (2004). *Title of Working Paper in Italics*. Working Paper No. 123, University, City.

Website references should be listed as follows:

Smith, A. (1999). Select committee report into social care in the community. http://www.dhss.gov.uk/reports/report015285.html (accessed on 7 November 2003).

In the text, where the author's name appears, the date should follow in parentheses, e.g., Mintzberg (1985). If the author's name is not present in the text, insert it with the author's name and date in parentheses, e.g., (Mintzberg, 1985).

Processing of Manuscripts and Production:

When a paper is received the Editors will read it and decide whether to send it out to referees. Typically this decision takes no more than two weeks. Three referees' reports are sought and an initial decision should take no more than three months.

Submission of a manuscript implies commitment to publish in the Journal. Submission to the *Journal of Management Studies* implies that the manuscript has not been published elsewhere, nor is it under consideration by another journal. Authors in doubt about what constitutes prior publication should consult one of the General Editors.

Authors who submit manuscripts to the *Journal of Management Studies* are expected to reciprocate by serving as reviewers for the *Journal of Management Studies* if called upon to do so.

The file should be MS word. Authors are encouraged to try and include tables and figures as part of the main file.

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Authors will be required to assign copyright in their paper to Wiley-Blackwell. Copyright assignment is a condition of publication and papers will not be passed to the publisher for production unless copyright has been assigned. To assist authors, an appropriate copyright assignment form will be supplied by the editorial office when a paper has been accepted. Government employees need to complete the Author Warranty sections, although copyright in such cases does not need to be assigned.

Lampiran 4. Paper Submission Guide

International Journal of Economics and Finance (IJEF) is a peer-reviewed journal, published by Canadian Center of Science and Education. The journal publishes research papers in the fields of economics, accounting and finance.The journal is published in both printed and online versions. The online version is free access and download. Please click on "about" above to see information on editorial board, policies, submissions etc

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, will not be published elsewhere in the same form, in English or in any other language, without the written consent of the Publisher. The Editors reserve the right to edit or otherwise alter all contributions, but authors will receive proofs for approval before publication.

Copyrights for articles published in CCSE journals are retained by the authors, with first publication rights granted to the journal. The journal/publisher is not responsible for subsequent uses of the work. It is the author's responsibility to bring an infringement action if so desired by the author.
All manuscripts should be submitted electronically in MS-Word format to the E-mail address which appears on the journal webpage.

Paper Selection and Publication Process

a) Upon receipt of paper submission, the Editor sends an E-mail of confirmation to the corresponding author within 1-3 working days. If you fail to receive this confirmation, your submission/email may be missed.
b) Peer review. We use single-blind system for peer-review; the reviewers' identities remain anonymous to authors. The paper will be peer-reviewed by three experts; one is an editorial staff and the other two are external reviewers. The review process may take 1-2 weeks.
c) Notification of the result of review by E-mail.
d) The authors revise paper and pay publication fee.
e) After publication, the corresponding author will receive two copies of printed journals, free of charge. If you want to keep more copies, please order at: JournalBuy.com
f) E-journal in PDF available on the journal’s webpage, free of charge for download.

General

Language
Please write your text in good English (American or British usage is accepted, but not a mixture of both); decimal points (not commas); use a space for

thousands (10 000 and above). We only accept manuscripts in English language.

Length of paper: 3000-8000 words are preferred.

Title Page

Title page is a separated page before the text. Provide the following information on the title page (in the order given). It should include:

Title

Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

Author's names and affiliations

Please indicate the given name and family name clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address, and telephone number of each author.

Corresponding author

Clearly indicate who is willing to handle correspondence at all stages of refereeing, publication and also post-publication. Ensure that telephone numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.

Sponsoring information

If the research is sponsored or supported by an organization, please indicate it.

General Rules for Text

Please use the following rules for whole text, including abstract, keywords, heading and references.

Font: Times New Roman; Size: 10

Paragraph Spacing: Above paragraph – 0 pt; Below paragraph – 4 pt

Line Spacing: fixed – 12 pt

Heading 1: Times New Roman; Size-10; Bold; for example, **1. Introduction**

Heading 2: Times New Roman; Size-10; Italic; for example, *1.1 Research Methods*

Heading 3: Times New Roman; Size-10; for example, 1.1.1 Analysis Result

Preparation of text

Abstract

A concise and factual abstract is required (maximum length of 150 words). The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be

avoided, but if essential, they must be cited in full, without reference to the reference list.

Keywords
Immediately after the abstract, provide a maximum of 8 keywords, avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible.

Subdivision of the article
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1., 2., (then 1.1, 1.1.1, 1.1.2), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text.' Any subsection, ideally, should not be more than 600 words. Authors are urged to write as concisely as possible, but not at the expense of clarity.

Figure legends, figures, schemes
Present these, in this order, at the end of the article. They are described in more detail below. High-resolution graphics files must always be provided separate from the main text file.

Tables
Present tables, at the end of the article. Number tables consecutively in accordance with their appearance in the text. Place description to tables below the table body. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

Formula
The text size of formula should be similar with normal text size.

References
Responsibility for the accuracy of bibliographic citations lies entirely with the authors.

Citations in the text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Avoid citation in the abstract. Unpublished results and personal communications should not be in the reference list, but may be mentioned in the text. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Citing and listing of web references
As a minimum, the full URL should be given. Any further information, if known (author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Text

Citations in the text should follow the referencing style used by the American Psychological Association. You can refer to the Publication Manual of the American Psychological Association, Fifth Edition, ISBN 1-55798-790-4, copies of which may be ordered from http://www.apa.org/books/4200061.html or APA Order Dept., P.O.B. 2710, Hyattsville, MD 20784, USA or APA, 3 Henrietta Street, London, WC3E 8LU, UK. Details concerning this referencing style can also be found at http://humanities.byu.edu/linguistics/Henrichsen/APA/APA01.html.

List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters "a", "b", "c", etc., placed after the year of publication.

Examples:

Reference to a journal publication:

Van der Geer, J., Hanraads, J. A. J., & Lupton R. A. (2000). The art of writing a scientific article. *Journal of Scientific Communications*, 163, 51-59.

Reference to a book:

Strunk, W., Jr., & White, E. B. (1979). *The elements of style.* (3rd ed.). New York: Macmillan, (Chapter 4).

Reference to a chapter in an edited book:

Mettam, G. R., & Adams, L. B. (1994). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281-304). New York: E-Publishing Inc.

Reference to a web source:

Smith, Joe, (1999), One of Volvo's core values. [Online] Available: http://www.volvo.com/environment/index.htm (July 7, 1999)

Note:

a). Please present the Tables and Figures at the end of the paper.

b). Please avoid using footnotes. Change footnotes to endnotes. Insert "(Note 1, Note 2)" in normal text, and explain the note after References. Please see “Example Paper” and “Template”.

c). Please do not use any colors more than white and black in paper. The layout of paper is only in white and black.

Lampiran 5. Instructions to Authors

International Journal of Medical Sciences is a peer-reviewed journal publishing papers of significance in all areas of medical sciences. Articles include original research papers, reviews and short research communications. Submissions of basic and clinical research are both considered.

Original research papers, reviews, and short research communications can be submitted to the Journal on the understanding that the work has not been published previously in whole or part and is not under consideration for publication elsewhere. There is no limit on the length of papers, except for short research communication that is restricted under 2500 words (excluding references and abstract). Authors are encouraged to be concise.

For general information about preparing biomedical manuscripts, please consult the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication", available from http://www.icmje.org/.

Review/Decisions
Manuscripts (other than those that are of insufficient quality or unlikely to be competitive enough for publication) will be reviewed and a decision typically returns to the authors within one month. **Manuscripts with significant results will be reviewed and published at the highest priority and speed.** Possible decisions on manuscripts are: accept as is, minor revision, major revision, or reject. Revised manuscripts should be returned within 1 month in the case of minor revision, or 3 months in the case of major revision.

Author Biography
Authors can publish a biography together with the paper, with information such as MD/PhD degree, past and present positions, research interests, awards, etc. This increases the profile of the authors. Author biography can be added at the end of paper. We find that this section is very well received by readers. *If you would like to publish an author biography, please submit it to the editorial team as soon as the paper is accepted for publication..*

Format for Submission
Authors can format their papers in any convenient style for submission and review purpose. Please embed figures and tables in the manuscript to become one single file for submission. Submission instructions can be found in the submission page.

Format for Publication

References
Please number the references consecutively in the paper.

Journal Paper
Please use the PubMed citation format. Journal paper should have journal name/abbreviation, year, volume and page numbers. Please use ":" to separate

volume and first page number. Omit any "." in the journal abbreviations. The sequence is as:
[Author surname] [Author initials], [Other author surnames & initials]. [Article title]. [Journal name abbreviation]. [Year]; [Volume]: [First page number]-[Last page number].
Example:

Eknoyan G, Beck GJ, Cheung AK, et al. Effect of dialysis dose and membrane flux in maintenance hemodialysis. N Engl J Med. 2002; 347: 2010-9.

Book

Kiloh LG, Smith JS, Johnson GF, et al. Physical treatment in psychiatry. Boston, USA: Blackwell Scientific Publisher; 1988.

Chapters in Edited Book

Beckenbough RD, Linscheid RL. Arthroplasty in the hand and wrist. In: Green DP, ed. Operative Hand Surgery, 2nd ed. New York: Churchill Livingstone; 1988: 167-214.

Web Site

[Internet] WHO: Geneva, Switzerland. Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003. Revised 26 September 2003. http://www.who.int/csr/sars/country/table2003_09_23/en/

[Internet] Kornberg R.
http://nobelprize.org/nobel_prizes/chemistry/laureates/2006/press.html
Please do not include unpublished observations, personal communications, conference abstracts or conference papers as references.

Title, Author, Abstract

The first page should include the article title, author's name(s), affiliation(s) with complete addresses, corresponding author's phone/fax number and email address. Abstract should be no more than 250 words with no citation to references. Please provide 5-6 keywords after the abstract.

Figures

Original files from the drawing software (e.g. PowerPoint, Photoshop, Microsoft Excel, ...) that was used to create the figures are acceptable. Photo images should be of high resolution - e.g. 600dpi in tiff/jpeg format.

Citation of Tables and Figures

Tables and Figures should be numbered consecutively. Citation of tables and figures in the main text should use the format: Table 1, Figure 1, or Fig. 2, Fig. 3. The abbreviation of "Table" by "Tab.", for example, "Tab. 1" should be avoided. Parts in a figure can be identified by a, b, c, d, ... and the citations Figure 2a, Figure 2b, Figure 2c.

Math Formulas and Symbols

Simple mathematical formulas should be constructed using superscript, subscript, italic, and symbols in the Microsoft Word.

- Use symbols in the Fonts: (normal text) or Symbol fonts. To insert a symbol, use Insert/symbol in the Word menu.
- Use / for "divide" or "over". For example, 1/7, 5/(4+6).
- Use Symbol fonts for "±"; "≤" and "≥" (avoid underline).

Ethics Committee Approval and Patient Consent

Experimental research involving human or animals should have been approved by author's institutional review board or ethics committee. This information can be mentioned in the manuscript including the name of the board/committee that gave the approval. Investigations involving humans will have been performed in accordance with the principles of Declaration of Helsinki. And the use of animals in experiments will have observed the *Interdisciplinary Principles and Guidelines for the Use of Animals in Research, Testing, and Education* by the New York Academy of Sciences, Ad Hoc Animal Research Committee.

If the manuscript contains photos or parts of photos of patients, informed consent from each patient should be obtained. Patient's identities and privacy should be carefully protected in the manuscript.

Conflict of Interests

Conflict of interests that might interfere with the objective presentation of the research findings contained in the manuscript should be declared in a paragraph heading "Conflict of interests" (after Acknowledgment section and before References). Examples of conflict of interests are ownership of stock in a company, grants, board membership, etc. If there is no conflict of interests, please use the statement "The authors have declared that no conflict of interest exists".

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Reprints can be ordered at the time of publication. Reprints are of professional quality suitable for scientific corresponding.

Lampiran 6. Guide to Authors

International Journal of Agricultural Research publishes original research papers on all aspects of animal and pastoral science relevant to temperate and subtropical regions. Subject matter includes soil science, fertilizers, insect pests, plant pathology, weeds, forage crops, management systems, and agricultural economics as well as agronomy and animal science.

International Journal of Agricultural Research is a unique forum for disseminating current information to researchers in universities, research institutes, and other centers concerned with animal and pastoral science and its application. Papers will be accepted only after peer-review.

General Format

Before submission of the new manuscript authors should consider the following general rules for preparation of the manuscript. Please read these instructions carefully and follow the guidelines strictly.

Fonts: Important – Use Times or Times New Roman 12 point size only (other sizes as specified), and Symbol font for mathematical symbols (in the text and in the figures).

Justification should be set to full (or left only, if preferred).
Do not underline: Use italics, bold or bold italics instead.
Line spacing should be set at 2 (Double).
Leave a line space between paragraphs and sections.
Leave a line space between section titles and text.
Leave only one space after a full stop.

Manuscripts must be typed on A4 (210 × 297 mm) paper, double-spaced throughout and with ample margins of at least 3.5 cm. All pages must be numbered consecutively. Starting with the title page as p.1, the text, which begins with p.2, is to be arranged in the following order: abstract, brief introduction, materials and methods, results, discussion, acknowledgements, references, figure legends, tables.

The first page of the full manuscript must begin with the title of the paper centered on the page in 14 point Bold Title Case (title case means first letter of each main word capitalized), the names of the authors (Initials – followed by a period each – Family Name) with the main author's name mentioned first, the names and locations of the authors' affiliations (Title Case), and the e-mail address of the main author. The title page must provide the title in English, a short title of not more than 45 characters (including spaces) to be used as running head, up to five topical key words in English for subject indexing, the full postal address of the corresponding author to whom proofs will be sent.

The title should be brief and should indicate the species studied. Subtitles are not encouraged.

The abstract should not exceed 250 words, should be one paragraph and should be free of references and abbreviations. It should indicate clearly the scope and main conclusions of the paper.

The introduction should give the pertinent background to the study and should explain why the work was done.

The materials and methods (or methodology) should give essential details, including experimental design and statistical analysis.

The results should present the findings of the research. They should be free from discussion. Results should be written in the past tense.

The discussion should cover, but not simply repeat the new findings and should present the author's results in broader context of other work on the subject interpreting them with a minimum of speculation.

The acknowledgements should be as brief as possible.

Research Articles

Research articles present original research and address a clearly stated specific hypothesis or question. Papers should provide novel approaches and new insights into the problem addressed. Research Article should arrange in the following order: abstract, brief introduction, materials and methods, results, discussion, acknowledgements, references, figures, tables.

Lampiran 7. IJME Review Submission

The International Journal of Modern Engineering (IJME) is the first official and flagship journal of the International Association of Journals and Conferences (IAJC). IJME is a highly-selective, peer-reviewed print journal, covering topics that appeal to a broad readership of various branches of engineering and related fields.

IJME is steered by a distinguished Board of Directors and is supported by an international review board consisting of prominent individuals representing many well-known universities, colleges, and corporations in the United States and abroad.

To maintain a high-quality journal, manuscripts that appear in the IJME *Articles* section have been subjected to a rigorous review process. This includes blind reviews by three or more members of the international editorial review board, followed by a detailed review by the IJME editors.

IJME Review Submission

Manuscript Guidelines to Submit a Paper for Review to IJME

1. Word Document Page Setup: Top = 1", Bottom = 1", Left = 1.25", and Right = 1.25". This is the default setting for Microsoft Word. Do Not Use Headers or Footers
2. Text Justification: Submit all text as "LEFT JUSTIFIED" with No Paragraph Indentation.
3. Page Breaks: No page breaks are to be inserted in your document.
4. Font Style: Use 11-point Times New Roman throughout the paper except where indicated otherwise.
5. Image Resolution: Images should be 96 dpi, and not larger than 460 X 345 Pixels.
6. Images: All images should be included in the body of the paper. (.jpg or .gif format preferred)
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14. Tables and Figures: Center all tables with the caption placed one space above the table and centered. Center all figures with the caption placed one space below the figure and centered.
15. Page limit: Submitted article should not be more than 15 pages.
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Lampiran 8. **SUBMISSION GUIDELINES**

The Journal of Criminal Law and Criminology (JCLC) has played a unique role in the history of criminology in America. JCLC continues to provide a forum for dialogue and debate on such topics as white-collar crime, constitutional questions, international law, evidence, jurisdiction, and securities regulation. The Journal remains one of the most widely circulated law journals in the country with a broad readership that includes judges and legal academics, as well as practitioners, criminologists, and police officers.

Style Guidelines for the Preparation of Manuscripts

General Information

Please submit your manuscript as word-processing files on a CD, USB flash drive, or floppy disk accompanied by one double-spaced, unbound copy (letter-quality printout) that exactly matches the files. Submission of electronic files via e-mail is not acceptable except under special circumstances and only with the prior approval of your acquiring editor. Label the disk or flash drive with your name, type of hardware (PC or MAC), type of software (program and version), and date.

Formatting

Our guidelines for the electronic preparation of manuscripts provide detailed information about formatting. In general, your printout should look as plain as possible, as if you used a typewriter to prepare your manuscript. This means avoiding the desktop publishing (i.e., fancy formatting) features that have been incorporated into most word-processing programs. When considering graphs, line drawings, maps, photographs, and tables for inclusion in your manuscript, you should bear in mind that the trim size of most books we publish is 6 x 9 inches, which means a type page (i.e., usable space) of about 41/2 x 71/4 inches, including captions. For oversized or highly detailed illustrative material, it's best to reduce it on a photocopier to determine whether it will be readable on a book page.

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Section 107 of the Copyright Law of 1976 indicates that the following factors must be taken into consideration when determining fair use:

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3) the nature of the copyrighted work;
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In deciding what constitutes fair use, it is reasonable to expect that a book of readings may be more commercially profitable than a critical study and that using one 4-line section of a 100- line poem is less significant than using 4 lines from a 12-line poem. You must also take into account the familiarity of the poem or poet. Even if you may be quoting two lines from, for instance, a Gwendolyn Brooks poem, you are better off requesting permission from the estate. Lyrics and music almost always require permission, no matter how much you are reprinting, because of their strictly enforced copyrights. ASCAP and BMI represent most songwriters, composers, and music publishers. If some of your own writing in the manuscript has been previously published, either in journals or books, you may need permission or assignment of copyright from the earlier publisher, depending on the length and nature of the reprinted material.

With regard to previously unpublished material, in general a small, noncontroversial quotation used without permission may be acceptable, whereas a substantial or controversial quotation requires permission from the author or the author's heirs, unless all rights have been yielded to another, such as an archive, in which case the archive is empowered to grant and must be approached for permission. Ownership of a physical item (such as a letter) does not give ownership of the intellectual property (the letter's contents). Barring clear and unambiguous assignment of copyright, all copyrights belong to the author, whether or not the material in question has been published.

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Please check, correct, and bring your manuscript and disk up to date before final submission. It is your responsibility prior to copyediting—not the copy editor's or eventually the proofreader's responsibility—to verify facts, including dates, and to check each quotation against the original source. You should check and correct the spelling of all personal and place names as well as all foreign-language terms, inserting accents marks as needed. Notes should be read against the text and the bibliography (if there is one) for correct and consistent citation of author, publisher, place and date of publication, and to verify that each note corresponds to the section of text indicated. If short titles are used in the notes or the text, please make sure that they are consistent from one chapter to the next.

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Notes, if any, will likely appear either at the end of the book (with running heads that provide inclusive page numbers relating the notes to the text) or at the ends of chapters (required for edited collections). If you have a preference for one placement or the other you should discuss it with your sponsoring editor. Bear in mind that we rarely set notes at the foot of the page. Below are some examples of reference styles that are acceptable to the Press.

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2. Ibid., 261.
3. C. E. Lindblom, *The Policy-Making Process* (Englewood Cliffs, N.J.: Prentice Hall, 1969), 33.
4. Ann E. Gordon and Mari Jo Buhle, "Sex and Class in Colonial and Nineteenth-Century America," in *Liberating Women's History: Theoretical and Critical Essays*, ed. Berenice A. Carroll (Urbana: University of Illinois Press, 1976), 278-300.
5. Lindblom, *Policy-Making Process*, 203-4.
6. Gordon and Buhle, "Sex and Class," 280-83.

Note the inclusion of publishers' names (not mandatory but strongly preferred) and the avoidance of op. cit. in notes 5 and 6. When the state or country is needed in publication information, you should use the standard abbreviation, not the two-letter ZIP code abbreviation. If your notes will appear at the ends of chapters, a full citation is needed the first time a work is cited in each chapter; if your notes will be gathered at the end of the book, a full citation at first appearance in each chapter is optional (i.e., once you have given a full citation for a work, you may thereafter, in subsequent chapters, use only the shortened form).

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1. Friedman, "Conceptual Model."
2. Ibid., 261.
3. Lindblom, *Policy-Making Process*, 33.
4. Gordon and Buhle, "Sex and Class."
5. Lindblom, *Policy-Making Process*, 203-4.
6. Gordon and Buhle, "Sex and Class," 280-83.

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Friedman, John. "A Conceptual Model for the Analysis of Planning Behavior." *Administrative Science Quarterly* 12 (Sept. 1967): 225-52.

Gordon, Ann E., and Mari Jo Buhle. "Sex and Class in Colonial and Nineteenth-Century America." In *Liberating Women's History: Theoretical andCritical Essays.* Ed. Berenice A. Carroll. 278-300. Urbana: University of Illinois Press, 1976.

Lindblom, C. E. *The Policy-Making Process.* Englewood Cliffs, N.J.: Prentice Hall, 1969.

Lampiran 9. Guide for Authors

The International Social Science Journal, founded by UNESCO in 1949, is published quarterly in six language editions: English, French, Spanish, Arabic, Chinese and Russian. Its purpose is to bridge diverse communities of social scientists, working in different problems and disciplines, from different parts of the world. It provides information and debate on subjects of interest to a broad international readership, written by an equally international range of authors. The ISSJ has a particular interest in policy-relevant questions and interdisciplinary approaches. It serves as a forum for review, reflection and discussion informed by the results of relevant research, rather than as an outlet of "first publication" for the results of individual research projects. The Editor will be pleased to comment on the possible suitability of material in advance of submission.

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Articles should be submitted as email attachments readable by Word for Windows and addressed to: issj@unesco.org. If this is not possible, a diskette may be accepted. Normally, hardcopy is not necessary. If neither of the above is possible, the author should contact the editorial office beforehand.

LENGTH OF MANUSCRIPTS

Unsolicited manuscripts for the "Open Forum" section should normally be between 6,000 and 8,000 words, including all notes, tables, graphics and references. Authors considering submission or longer or shorter pieces are advised to discuss the matter with the Editor in advance of submission. Shorter pieces are welcome for the "Continuing debate" and "Social science sphere" sections.

GENERAL POINTS TO BEAR IN MIND WHEN WRITING

- In line with the profile of the *Journal*, articles should be appealing and accessible to those not specialised in their particular subjects. Excessive technicality, jargon and methodological protocol are to be avoided in favour of direct, clear language.
- Since the *ISSJ* is translated into six languages, and moreover is read by many persons in what, to them, is a foreign language, the exposition should be as clear as possible, avoiding colloquialisms and explaining any local circumstances, terms or concepts which might not be widely familiar.
- Whilst the editorial staff verifies the stylistic acceptability of texts, and authors may be consulted on any problems which arise, it is important that manuscripts be presented in fully finished form. UNESCO also reserves the right to editorial revision and abbreviation of the text, although any revision involving substantial change will be forwarded to the author for accord before publication.
- It is not the policy of the *ISSJ* to publish articles that have already been published elsewhere, or which are in press or under consideration by other journals. Authors are requested to honour this rule when submitting manuscripts.

- Controversial ideas or doctrines should, as far as possible, be discussed in a positive manner, and in such a way as to avoid the imputation of ulterior motives to those who hold different views.
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- Acceptance of an article and payment of the honorarium for work done does not commit UNESCO to publish.

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Authors should consult a recent issue of the ISSJ to serve as a guide for presentation. Note in particular:

Title: should be clear and informative, without straining for literary effect or allusion. Not too long (should preferably fit into one line, without subtitle), without quotation marks within it, and not in interrogative form. Notes should not be multiplied unreasonably. It is generally possible and often preferable to integrate elegantly much note material (and indeed, sometimes all of it) as asides in the text itself. They should not be used as a means of calling references, which should instead be called directly from the text. When used, notes should be numbered consecutively, called at the appropriate point of the text with the call number raised one space thus1, and presented in numerical order at the end of the text (not at the bottom of the page). Authors are requested *not* to use special endnote formatting systems, as this creates difficulties of manuscript manipulation for the editorial office, translators, publisher, and printer. Notes should be in plain text, the same font as the main text (12 point Times New Roman) and should not be automatically numbered.

Acknowledgements: if any, they should be placed in a note, marked by an asterisk rather than a numeral, at the beginning of the notes section, and called from the article title.

References: given the profile of the *Journal*, in general authors should not seek to compile comprehensive reference lists. The references should be restricted to those that are really useful to the readers or necessary for authentification. Normally, the list should not exceed 25 items. If the author believes that there is a need to go beyond that limit, the editorial office should be contacted before submission of the article.

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Bibliographical details should be complete and correct. They should be gathered at the end of the article (not at the foot of each page) after the notes (if any) in the following forms for articles and for books. A more

detailed guide to citation of other kinds of sources is available from the editor on request.

LI, T.M., 1996. Images of community: Discourse and strategy in property relations. *Development and Change*, 27(3), 501-27.

HOY, D.C., 1986. Power, repression, progress: Foucault, Lukes and the Frankfurt School. *In:* D.C. Hoy, ed., *Foucault: A Critical Reader*. Oxford: Basil Blackwell, 123-48.

ARMSTRONG, J., 1985. *Long-Range Forecasting: From Crystal Ball to Computer*. Toronto: Wiley.

MERCER, P.A. AND SMITH, G., 1993. *Private Viewdata in the UK*. 2nd ed. London: Longman.

Quotations. They should be as few as possible and should not exceed one paragraph in length. "Keynote" quotations are not accepted. Quotations should be in the same language as the main text of the article. When the quotation has been translated by the author, it *must* be accompanied (on a separate sheet for the editor) by the full original language version. The *ISSJ* is translated into six languages (one of which may even be the original language of the quotation), and chain translation produces linguistically unacceptable and bibliographically incoherent results.

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Emphasis. Avoid excessive use of emphasis – too much emphasis destroys its effect. It should be expressed by italics (rather than bold or underlining).

Formatting. Use 12 point type in Times New Roman with standard margins at one-and-a-half line spacing; justified text; one extra space between paragraphs.

Do not indent paragraphs. Put emphasis and foreign words in italics.

All titles and headings should be in the same font and size as the text. Title and author name should be bold and centred. Main headings in bold flush left; second level of headings in italic flush left, third level in italic underlined indented 1.5 cm. Try to avoid further layers of headings.

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Tables and figures. They may be included but should not be multiplied beyond necessity. None should require more than one printed page and each should carry a number (e.g. Table 1) and title above, and a source below. Footnotes should not be attached to figures or tables; such information should be incorporated into the caption or source. Tables

should normally be presented in the same word-processing software as used for the main text (e.g. Word), and presented with that text in a single file. They may be placed in the text, or grouped at the end (after the notes but before the references).

If there are figures, they should be in software readable by Microsoft Office, and should be presented in a separate electronic file. If scanned or otherwise digitally captured, these must be provided for publication in high resolution (800 dpi). However, in order to facilitate file exchanges, lower resolutions are recommended at the submission / evaluation stage. Their placement in the text (or at its end) should be indicated clearly (e.g. “Figure 1 about here”). It is understood that problems of pagination may oblige the printer to relocate slightly.

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• Biographical note
• Body of the text (with title and author’s name repeated at top of first page)
• Notes if any
• Other auxiliary material e.g. appendices, tables, figures, if any
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Tel n°: + 33 1 45 68 38 28
Email: j.crowley@unesco.org
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Lampiran 10. Instructions to Authors

Canadian Journal of Civil Engineering

Parts of manuscript

The manuscript should be double-spaced, on paper 8.5 in. × 11 in. (or ISO A4). Each page should be numbered, beginning with the title page. For material that is to be set in italics, use an italic font; do not underline. Use capital letters only when the letters or words should appear in capitals. The manuscript will include, in the following order, title page, abstract, main body of the text, acknowledgements, references, list of symbols, tables, list of figure captions, and appendices.

Length — Articles should normally be limited to 9000 words or word equivalents, including tables and figures. (As a guide, a typical figure should be counted as 250 words.) Technical notes, discussions, and book reviews should normally be limited to 3000, 2000, and 1000 words, respectively.

Spelling should follow that of *Webster's Third New International Dictionary* or the *Oxford English Dictionary*. Authors are responsible for consistency in spelling.

Abbreviations, nomenclature, and symbols for units of measurement should conform to international recommendations. SI units (Système international d'unités) should be used or SI equivalents should be given. This system is explained and other useful information is given in the *Canadian Metric Practice Guide* (2000) CAN/CSA-Z234.1–10, published by Canadian Standards Association (5060 Spectrum Way, Suite 100, Mississauga, ON M9W 1R3, Canada). For practical reasons, some exceptions to SI units are allowed. Acronyms should be defined when they are first mentioned in the text.

The title page should contain the following. (*i*□) The full title of the paper. (*ii*□) Authors listed in the order in which they are to appear at the head of the printed article. (*iii*□) Affiliation and address for each author. This should reflect the affiliation and address at the time of the study. Indicate current affiliations and addresses that differ from those in the by-line in a footnote. (*iv*□) Name, address, telephone number, fax number, and e-mail address of the author responsible for correspondence. (*v*□) Word count.

The Abstract should not be more than 150 words (shorter for notes), and on a separate page. The concise abstract should present the paper content accurately and should supplement, not duplicate, the title in this respect. References should not be cited in the abstract. Authors able to submit abstracts in both fluent English and French are encouraged to do so. Key words should not exceed 10 and should be placed directly below the abstract. Ideally, all key words used will be referenced in the *Thesaurus of Engineering and Scientific Terms*, published by the American Association of Engineering Societies, Washington, D.C.

Footnotes to material in the text should not be used unless they are unavoidable, but their use is encouraged in tables. Where used in the text, footnotes should be cited in the manuscript by superscript Arabic numbers (except in the tables, see below) and should be numbered serially beginning with any that appear on the title page. Each footnote should be typed on the manuscript page upon which the reference is made; footnotes should not be included in the list of references.

Equations should be presented clearly, triple-spacing should be used if superscripts and (or) subscripts are involved. Superscripts and subscripts should be

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Acknowledgements should be written in the third person and kept to a concise recognition of relevant contributions.

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General guidelines on references

References to nonrefereed documents (e.g., contract reports) must include the address where they can be obtained.

Examples of types of references, including electronic references

The following bibliographic citations illustrate the punctuation, style, and abbreviations for references.

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Journal article available online only (with DOI):

van der Sanden, J.J., and Hoekman. D.H. 2005. Review of relationships between grey-tone co-occurrence, semivariance, and autocorrelation based image texture analysis approaches [online]. Canadian Journal of Remote Sensing, 31(3): 207–213. doi:10.1139/rs03-011.

Report:

Sanders, W.W., Jr., and Elleby, H.A. 1970. Distribution of wheel loads in highway bridges. National Cooperative Highway Research Program Report 83, Transportation Research Board, National Research Council, Washington, D.C.

Book:

Williams, R.A. 1987. Communication systems analysis and design. Prentice-Hall, Inc., Englewood Cliffs, N.J.

Part of book:

Healey, M.C. 1980. The ecology of juvenile salmon in Georgia Strait, British Columbia. *In* Salmonid ecosystems of the North Pacific. *Edited by* W.J. McNeil and D.C. Himsworth. Oregon State University Press, Corvallis, Oreg. pp. 203–229.

Paper in conference proceedings:

Hardin, B.O. 1978. The nature of stress–strain behaviour for soils. State-of-the-art report. *In* Proceedings of the Specialty Conference on Earthquake Engineering and Soil Dynamics, Pasadena, Calif., 19–21 June 1978. American Society of Civil Engineers, New York, pp. 3–90.

Institutional publications and pamphlets:

Dzikowski, P.A., Kirby, G., Read, G., and Richards, W.G. 1984. The climate for agriculture in Atlantic Canada. Available from the Atlantic Advisory Committee on Agrometeorology, Halifax, N.S. Publ. ACA 84-2-500. Agdex No. 070.

Corporate author:

American Public Health Association, American Water Works Association, and Water Pollution Control Federation. 1975. Standard methods for the examination of water and wastewater. 14th ed. American Public Health Association, American Water Works Association, and Water Pollution Control Federation, Washington, D.C.

Thesis:

Keller, C.P. 1987. The role of polysaccharidases in acid wall loosening of epidermal tissue from young *Phaseolus vulgaris* L. hypocotyls. M.Sc. thesis, Department of Botany, The University of British Columbia, Vancouver, B.C.

Electronic citation:

Quinion, M.B. 1998. Citing online sources: advice on online citation formats [online]. Available from worldwidewords.org/articles/citation.htm [cited 20 October 2005].

Citation including URL:

Tremblay, R. 1998. Development of design spectra for long-duration ground motions from Cascadia subduction earthquakes. Canadian Journal of Civil Engineering, 25(6): 1078–1090. Available from pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_abst_e?cjce_l98-028_25_ns_nf_cjce6-98. [accessed 20 October 2005].

Citation including DOI:

Tremblay, R. 1998. Development of design spectra for long-duration ground motions from Cascadia subduction earthquakes. Canadian Journal of Civil Engineering, 25(6): 1078–1090. doi:10.1139/L04-079.

Tables must be typed on separate pages, placed after the list of references, and numbered using Arabic numerals in the order cited in the text. The title of the table should be a concise description of the content. Column headings should be brief, but may be amplified by footnotes. Vertical rules should not be used. A copy of the Journal should be consulted to see how tables are set up and where the lines in them are placed. Footnotes in tables should be designated by symbols (in the order *, †, ‡, §, ll, ¶, #) or superscript lowercase italic letters. Descriptive material

not designated by a footnote may be placed under a table as a Note. Numerous small tables should be avoided, and the number of tables should be kept to a minimum.

Figure captions should be double-spaced and listed on a separate page and placed after the tables.

Appendices — Figures and tables used in an appendix should be numbered sequentially but separately from those used in the main body of the paper, for example, Fig. A1, Table A1, etc. An appendix should have its independent list of symbols.

Computer programs — It is not the policy of the Journal to publish detailed printouts of computer program statements. Where the availability of these details enhances the usefulness of the paper, the author should submit two copies of the program for deposit (see "Supplementary material").

Supplementary material — Supplementary material (or data) consists of extra tables, figures (maps), detailed calculations, and datasets produced by the authors as part of their research, but not essential for understanding or evaluating the paper, and not published with the article in the print edition of the journal. This material is never edited, converted, or scanned, and therefore will appear exactly as submitted. This is to prevent any errors from being inadvertently introduced during file manipulation or printing. Tables and figures should be numbered in sequence separate from those published with the paper (e.g., Fig. S1, Table S1) and all supplementary material should be referred to in the manuscript by footnotes. Supplementary material must be submitted with the article in electronic format. During Web submission (OSPREY), relevant files should be attached under "Supplementary data".

Illustrations

Each figure or group of figures should be planned to fit, after appropriate reduction, into the area of either one or two columns of text. The maximum finished size of a one-column illustration is 8.6 cm × 23.7 cm (3.4 in. × 9.3 in.) and that of a two-column illustration is 18.2 cm × 23.7 cm (7.2 in. × 9.3 in.). The figures (including halftones) must be numbered consecutively using Arabic numerals, and each one must be referred to in the text and must be self-explanatory. All terms, abbreviations, and symbols must correspond with those in the text. Only essential labelling should be used, with detailed information given in the caption. The same information should not be presented in both graphical and tabular form.

Line drawings should be computer-generated graphics. All lines must be sufficiently thick (0.5 points minimum) to reproduce well, and all symbols, superscripts, subscripts, and decimal points must be in good proportion to the rest of the drawing and large enough to allow for any necessary reduction without loss of detail. Avoid small open symbols; these tend to fill in upon reproduction. The same font style and lettering sizes should be used for all figures of similar size in any one paper

Photographs should be continuous tone, of high quality, and with strong contrast. Only essential features should be shown. A photograph, or group of them, should be planned to fit into the area of either one or two columns of text with no further reduction. Electron micrographs or photomicrographs should include a scale bar directly on the print. The best results will be obtained if the authors match the contrast and density of all figures arranged as a single plate.

Multimedia — Audio and video clips in the major multimedia formats are now accepted for NRC Research Press journals published in full-text HTML. For accepted formats, see List of Accepted Graphic Files at pubs.nrc-cnrc.gc.ca/eng/journals/graphics.html

Colour illustrations will be at the author's expense. Further details on prices are available from Jennifer Stewart, Acting Managing Editor of the Journal (613-990-3474; fax: 613-952-7656; e-mail: jennifer.stewart@nrc-cnrc.gc.ca).

Lampiran 11. Instructions to Authors

International Journal of Biological Sciences
Published by Ivyspring International Publisher. ISSN: 1449-2288.

International Journal of Biological Sciences publishes peer-reviewed scientific papers of significance in all areas of biological sciences. The Journal targets wide ranges of international audiences of researchers and biotechnology company employees. The scope of the Journal includes cell biology, developmental biology, structural biology, microbiology, molecular biology & genetics, biochemistry, biotechnology, biodiversity, ecology, marine biology, plant biology, and bioinformatics. Articles of cross-disciplined research between biology and mathematics, physics, information science, material science and others are also considered. Selected papers from scientific meetings may be published as special issues of the Journal.

Instructions to Authors

Original research papers, short research communications, reviews or mini-reviews, letters to the editor can be submitted to the Journal on the understanding that the article has not been previously published in any other form and is not under consideration for publication elsewhere.

Research Paper: It should have a set of keywords (up to 6) and an abstract (under 250 words and contains no citation to references), followed by Introduction, Materials and Methods, Results, Discussion, Acknowledgments, Conflict of Interests, and References (the order of sections may be arranged differently). There is no limit on the length of research papers; however, authors are urged to be concise.

For general information about preparing biomedical manuscripts, please consult the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication", available from http://www.icmje.org/.

Review/Decisions

Manuscripts (other than those that are of insufficient quality or unlikely to be competitive enough for publication) will be reviewed and a decision typically returns to the authors within one month. **Manuscripts with significant results will be reviewed and published at the highest priority and speed.** Possible decisions on manuscripts are: accept as is, minor revision, major revision, or reject. Revised manuscripts should be returned within 1 month in the case of minor revision, or 3 months in the case of major revision.

Author Biography

Authors can publish a biography together with the paper, with information such as MD/PhD degree, past and present positions, research interests, awards, etc. This increases the profile of the authors. Author biography can be added at the end of paper. We find that this section is very well received by readers. *If you would like to publish an author biography, please submit it to the editorial team as soon as the paper is accepted for publication.* See a sample of author biography.

Format for Submission

Authors can format their papers in any convenient style for submission and review purpose. Please embed figures and tables in the manuscript to become one single file for submission. Submission instructions can be found in the submission page.

Format for Publication

References

Please number the references consecutively in the paper.

Journal Paper

Please use the PubMed citation format. Journal paper should have journal name/abbreviation, year, volume and page numbers. Please use ":" to separate volume and first page number. Omit any "." in the journal abbreviations. The sequence is as:

[Author surname] [Author initials], [Other author surnames & initials]. [Article title]. [Journal name abbreviation]. [Year]; [Volume]: [First page number]-[Last page number]. Example:

Eknoyan G, Beck GJ, Cheung AK, et al. Effect of dialysis dose and membrane flux in maintenance hemodialysis. N Engl J Med. 2002; 347: 2010-9.

Supplement: Example:

Volk HD, Reinke P, Krausch D, et al. Monocyte deactivation-rationale for a new therapeutic strategy in sepsis. Intensive Care Med. 1996; 22 (Suppl 4):S474-S481.

No author given: Example:

[No authors listed]. Medicare program; criteria for Medicare coverage of adult liver transplants-HCFA. Final notice. Fed Regist. 1991; 56(71):15006-15018.

In press: Example:

Cheung TMT, et al. Effectiveness of non-invasive positive pressure ventilation in the treatment of acute respiratory failure in severe acute respiratory syndrome. Chest; in press.

Epub ahead of print: Example:

Li W, Chen Y, Cameron DJ, et al. Elovl4 haploinsufficiency does not induce early onset retinal degeneration in mice. Vision Res 2007; [Epub ahead of print].

It is not necessary to highlight or italicize the title, journal name, or any part of references.

Book

Kiloh LG, Smith JS, Johnson GF, et al. Physical treatment in psychiatry. Boston, USA: Blackwell Scientific Publisher; 1988.

Chapters in Edited Book

Beckenbough RD, Linscheid RL. Arthroplasty in the hand and wrist. In: Green DP, ed. Operative Hand Surgery, 2nd ed. New York: Churchill Livingstone; 1988: 167-214.

Web Site

[Internet] WHO: Geneva, Switzerland. Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003. Revised 26 September 2003. http://www.who.int/csr/sars/country/table2003_09_23/en/

[Internet] Kornberg R. http://nobelprize.org/nobel_prizes/chemistry/laureates/2006/press.html

Please do not include unpublished observations, personal communications, conference abstracts or conference papers as references.

Title, Author, Abstract

The first page should include the article title, author's name(s), affiliation(s) with complete addresses, corresponding author's phone/fax number and email address. Abstract should be no more than 250 words with no citation to references. Please provide 5-6 keywords after the abstract.

Figures

Original files from the drawing software (e.g. PowerPoint, Photoshop, Microsoft Excel, ...) that was used to create the figures are acceptable. Photo images should be of high resolution - e.g. 600dpi in tiff/jpeg format.

Citation of Tables and Figures

Tables and Figures should be numbered consecutively. Citation of tables and figures in the main text should use the format: Table 1, Figure 1, or Fig. 2, Fig. 3. The abbreviation of "Table" by "Tab.", for example, "Tab. 1" should be avoided. Parts in a figure can be identified by a, b, c, d, ... and the citations Figure 2a, Figure 2b, Figure 2c.

Math Formulas and Symbols

Simple mathematical formulas should be constructed using superscript, subscript, italic, and symbols in the Microsoft Word.

- Use symbols in the Fonts: (normal text) or Symbol fonts. To insert a symbol, use Insert/symbol in the Word menu.
- Use / for "divide" or "over". For example, 1/7, 5/(4+6).
- Use Symbol fonts for "±"; "≤" and "≥" (avoid underline).

Ethics Committee Approval and Patient Consent

Experimental research involving human or animals should have been approved by author's institutional review board or ethics committee. This information can be mentioned in the manuscript including the name of the board/committee that gave the approval. Investigations involving humans will have been performed in accordance with the principles of Declaration of Helsinki. And the use of animals in experiments will have observed the *Interdisciplinary Principles and Guidelines for the Use of Animals in Research, Testing, and Education* by the New York Academy of Sciences, Ad Hoc Animal Research Committee. If the manuscript contains photos or parts of photos of patients, informed consent from each patient should be obtained. Patient's identities and privacy should be carefully protected in the manuscript.

Conflict of Interests

Conflict of interests that might interfere with the objective presentation of the research findings contained in the manuscript should be declared in a paragraph heading "Conflict of interests" (after Acknowledgment section and before References). Examples of conflict of interests are ownership of stock in a company, grants, board membership, etc. If there is no conflict of interests, please use the statement "The authors have declared that no conflict of interest exists".

Publication Fee

The Journal charges a publication fee of 1100 US dollars (890 Euro) when an article is accepted for publication. Published articles of the Journal are open access and full texts appear in PubMed Central. This effectively removes the barriers for timely distribution of the articles and ensures that they can be read by as many people as possible. The amount of publication fee charged is lower than many other PubMed Central journals (comparing to the fees charged by BioMedCentral and PLOS). Publication fee is required to cover the cost of the publication. Payment can be made by credit card, bank transfer, money order or check.

Lampiran 12. Tips on Scientific Writing. Michael A. Morrison.
Version 4.3: January 21, 2004

1. Elements and structure.

Everything you write|papers, letters, your thesis, books, reports, proposals, etc. should contain
at least the following elements:

1) Introduction
2) Body
3) Conclusion

Scientific papers also contain references, figures and/or tables, acknowledgements and, sometimes, appendices.

Introduction. Here you provide the context for your paper. Your introduction is your only chance to catch your reader's attention. Here you must make your topic sound so interesting that your reader will want to learn about it. You must also describe clearly and succinctly the topic of your paper. This description must be specific and focused, not vague and allencompassing.
It must give your reader a clear idea of precisely what your paper is about.
Finally, your introduction must focus your reader's attention inward towards the detailed discussion that will comprise the Body of your document.

Body. Here you develop a logical sequence of ideas that will lead your reader to an understanding of the points you're trying to make. Depending on the topic of, constraints on, and venue for your paper, the Body might contain historical background, details about experimental apparatus and measurements, relevant physical concepts, necessary mathematics and derivations (as few as possible), figures, tables, and so forth. The Body of your paper must be organized logically, not chronologically. Your paper is not a diary. Its job it to explain your findings, not narrate the sequence of events that led you to them.

Conclusion. Here you move your reader's focus outward from the detailed discussion in the Body of your paper. Here you also bring the paper to closure. One of the worst mistakes a writer can make is to end a paper without a conclusion. What you write in your conclusion is what your readers will remember. If you just stop, your readers will remember nothing.

Appendices (optional). Appendices contain information that doesn't belong in the Body of your paper. For instance, appendices are good places for mathematical derivations, apparatus details, or additional tabulated data.

References. Your reference list serves three purposes. First, your reference list gives credit where credit is due. You must provide a reference for every insight, paraphrase, result, derivation, idea, or direct quotation you take from another source. Failure to properly cite the literature you used constitutes plagiarism, one of the most heinous crimes in science. Second, your reference list provides your reader with carefully selected background references. Doing so is important, because one of your jobs is to enable your reader to gain the background required to understand your work. Third, your reference list

contributes to the context of your paper, situating it in the field in which you're working.

Figures. Whenever possible, use figures|rather than tables|to illustrate, clarify, and emphasize the points you want to get across. But use figures selectively. Don't show absolutely every result you generated. Some results (especially from tests you've done) can be summarized in the test. When preparing figures for your paper, follow these four rules. First, each figure caption must identify unambiguously each element (points, lines, etc.) in the figure. The caption must also explain briey the content of the figure, so a reader can understand the essence of the figure from the caption alone. Second, each figure must be cited and discussed in the Body of your paper. Never include a figure without explicitly discussing it. Third, axes on each figure must be labelled, including units wherever required. Fourth, make your figures consistent. That is, in all figures that show data of the same type, use the same line types and symbols.

Tables. Tables in a scientific paper serve two purposes. The primary purpose of a table is archival.

As a permanent record of the hard work you've done, figures are not suficient! You must include tables of selected or complete results for any data you want anyone to use in the future. (Many journals have on-line resources where they will make available data you provide. Use these resources when you have so much data that it makes no sense to try to include it all in your paper. If you're in this situation, though, you should consider including a table of selected results in the paper.) The secondary purpose of tables in a scientific paper is to make a point you can't make in a figure. Except to accomplish these two purposes, avoid tables.

Tables are almost always much less efective than figures. Figures are much easier for readers to assimilate and authors to discuss. A few pointers: Every table must have a caption. All tables must be cited and discussed in your paper. Never include a table without explicitly discussing it. Take extra care when you write the caption to a table. Future students and scientists will use data you tabulate. If you are not very careful and explicit in describing the precise content of a table, they will (unintentionally) misunderstand and misuse your results.

Always include units (as appropriate) for every column (or row) of your table.

2. Principles.

1. **Don't “write." Rewrite.**
   There is no final draft" of a paper. Plan from the outset to revise your paper many times. Keep revising until you run out of time or get so sick of your paper that you just quit.

2. **Do one thing at a time.**
   Writing a paper (a letter, a proposal, a quiz, instructions, etc.) requires lots of steps. You need to organize your ideas; figure out how to explain your ideas; decide how to illustrate your ideas; choose the equations, figures, and tables you'll include; decide how you're going to say what you're going to say; devise efective transitions between items you're discussing; check

spelling; fix grammar; polish your prose; include references; and lots more. The longer the document, the more steps you must complete. It should come as no surprise that to try to do all these things at the same time is to invite confusion, stress, and disaster. Do first things first. Brainstorm your ideas. Then organize them into a logical sequence. Then write about your ideas in general terms, not worrying about technicalities. then look at what you've written to see if your ideas follow one another logically. If they don't, rearrange them and try again. Then decide what figures, tables, equations, etc. you must include to explain your ideas. Then write a draft. Revise it a couple of times. And again. And so forth. If possible, get input from other readers. Revise again.

3. **Develop your paper from the inside out.**
   Write the Body first. You can't write the Conclusion before you write the Body. And it's much easier to write the Introduction once you know what you're introducing. Write the abstract and title last.

4. Don't try to write “polished" early drafts.
   Every draft should be readable and free of grammatical errors. But don't waste time trying to perfect early drafts. The purpose of an early draft is to get your ideas on paper in some sensible sequence. Polish during late revisions.

3. Strategies and Tactics.

There is no trick to writing an efective paper. The more you revise your paper, the more efective your paper will be. At some step in the development of your paper, you need constructive feedback from someone else. Choose your reader carefully. Your reader should be someone in the audience you've defined for the paper, someone who can be objective and constructive, and someone whose judgement you trust. Don't give your reader an early draft of your paper! Your reader's time is valuable. Give your reader a draft only when you're reasonably satisfied that your paper does what you think it does. The goal of getting feedback is to find out whether your paper actually does what you think it does.

Write in your own voice.

Your prose should be invisible. Its only job is to communicate to your reader clearly and interestingly. Don't use fancy words. Use as little specialized technical jargon as possible. Don't be cute. Don't use colloquial expressions or slang. Strike a balance between conversational informality and arch formality. Use active voice except when you really mean to imply passivity. That is, avoid the stilted, dull “passive voice" construction often found in (bad) science papers. If you're the sole author, use “I" when discussing your ideas and conclusions.

Always keep your audience in mind.

Remember, your reader knows (much) less about your topic than you do.

Define all symbols, specialized terms, and abbreviations.

Never use a symbol or acronym that you have not defined. Don't use specialized jargon that you have not de_ned. Use as few acronyms as possible. Rule of thumb: introduce an acronym only for a long phrase that you're going to use many times throughout the paper. For each acronym you do use, give its full name the first time (and only the first time) you use it.

Don't pad your paper.

Include what you need to make your points. Cut everything else.

Discuss each table, figure, or equation you present.

Never include a table, figure, or equation that isn't clearly and explicitly related to the points you're trying to make. What's “obvious" to you will almost certainly not be evident to your reader. For each such figure or table, always explicitly state what you want your reader to notice or conclude from the item. If you can't do this, cut the table or figure.

Don't lose focus. Be selective.

Know in advance what points you want to make. As you draft your paper, construct a line of argument that aims straight towards those points. You must justify, back up, and support every point you make. Don't wander from the main line of argument.

No tangents. No detours. Everything ion your paper should contribute to making, supporting, or providing a context for your points.

Be specific.

Never generalize. As you revise, scrutinize every paragraph and cut all generalizations and vague statements.

Tell a story.

The best papers have an internal logic that makes readers want to read them. Even when writing a research paper or a technical report, you can (almost always) organize your material so your paper has a well-de_ned beginning, middle, and end. Construct the Body in such a way that every step follows logically from the one before it. Never organize your paper chronologically.

4. Format.

Your paper must be completely free of typographical, mathematical, and grammatical errors.

Professionals do not submit error-ridden documents. You can almost guarantee that your paper will antagonize readers, reviewers, and editors by leaving technical errors in it. Eliminating technical errors from a paper requires time, effort, patience, and persistence. It is hard work that you must do. Run each draft through a spell checker. Check your figures. Check your tables. Check your references. Get a friend or two to proof it for you. Do whatever is necessary. But never submit a sloppy, error-ridden paper. You've invested precious time and energy in your work; your work deserves the best presentation you can give it.

Be sure your paper adheres to the formatting requirements of the journal to which you're submitting it.

You can find this information online. If you ignore it, then you'll look like an idiot to the editor, and the journal's processing of your paper will be delayed. Neither outcome is desirable.

Checklist of things to avoid.

Here's a short list of things that turn reviewers, editors, and readers of: typographical errors; gross grammatical errors; the words “obviously," “clearly," “easily,"; padding; jargon; lots of acronyms; undefined acronyms; inconsistent notation; undefined notation; inconsistent jargon or acronyms; missing units; huge paragraphs; paragraphs that make no point; run-on or very complicated sentences; pointlessly intricate mathematical notation, unnecessary derivations; figures that contain so many curves or symbols that readers can't tell one data set from the other; figures that contain curves or symbols that aren't identified on the figure or in the caption; captions to figures or tables that don't explain the content; tiny figures of data you should have tabulated; papers that bury the points they're trying to make.

Lampiran 13. 25 Tips Menulis Artikel Ilmiah

POSTED BY SIHAM AFATTA AT , Tuesday, 24 March 2009

1. Ketika Anda duduk dan siap menulis, ada seseorang yang sangat penting dalam hidup anda, namun Anda tidak akan pernah menjumpainya, disebut sebagai 'Pembaca'.
2. Anda menulis bukan untuk membuat kagum ilmuwan yang baru saja Anda temui, atau dosen yang membimbing sarjana Anda, atau rekan kerja yang selalu merendahkan Anda, atau juga meyakinkan seseorang di sebuah pertemuan bahwa Anda seorang penulis. Atau bahkan orang tua Anda. Anda menulis untuk menjamin mata Pembaca tidak terlepas dari posting tulisan Anda, yang dalam sepersekian detik bisa lepas, teralihkan pada salah satu dari milyaran informasi lainnya di internet.
3. Jadi, kalimat pertama, kedua, ketiga dan seterusnya adalah kalimat terpenting dalam hidup Anda. Ini dikarenakan, meskipun Anda - seorang karyawan, mahasiswa, praktisi ilmiah - merasa berkewajiban untuk menulis, tidak ada seorangpun yang merasa berkewajiban untuk membaca. Cerita adalah sesuatu yang Kita katakan, walaupun dalam sebaris kalimat saja, namun bisa membuat Pembaca meminta lagi dan lagi dan lagi.
4. Senang atau tidak, jurnalisme itu penting. Namun jangan sampai dipenuhi dengan kepentingan-diri Anda saja. Tidak ada yang membuat Pembaca lari dari Blog anda, menuju banner blog lain, atau beralih ke Google kecuali ketidak acuah Anda dengan mereka. Maka kata-kata sederhana, ide yang jelas, dan kalimat pendek itu penting dalam bercerita.
5. Satu lagi yang mungkin penting untuk diukir ditepi monitor anda. "Tak seorang-pun aka mengeluh karena Anda membuat sesuatu terlau mudah untuk dimengerti". Kata "Siapa, Apa, Dimana, Bagaimana dan Kapan?" adalah peralatan yang dibutuhkan dalam riset kita.
6. Oh ya, satu lagi yang perlu diingat ketika Anda duduk, siap dengan keyboard: ada suara halus berkata "Tak seorang-pun juga diharuskan membaca tulisan ini".
7. Jika bimbang, anggap Pembaca tidak tahu apa-apa. Namun, jangan sampai menganggap Pembaca itu bodoh. Kesalahan klasik Jurnalisme ialah terlalu berharap akan apa yang sudah diketahui Pembaca dan merendahkan intelegensi Pembaca.
8. Hidup ini rumit, namun Anda jangan menyampaikan tulisan dengan rumit. Banyak wacana dan isu - kedokteran, akuntansi, biologi, lingkungan, keuangan, politik - yang memang rumit sehingga membawa Pembaca menuju ke tempat seperti Detik.com, Yahoo!, Google, dll., mencari seusatu yang simpel, sederhana untuk dicerna
9. Ketika sebuah isu/topik terlalu rumit bagaikan kusutnya sepiring mie goreng, walaupun yang Anda bahas hanya sehelai mie, selalu perlahan angkat pembahasan dari gambaran besar sepiring mie goreng itu. Pembaca juga akan senang mendapat bagian yang singkat, sederhana, bukan keseluruhan yang rumit. Ini dikarenakan a) Pembaca tahu bahwa hidup itu rumit, namun bersyukur jika setidaknya salah satu kisah bisa diceritakan dengan jelas, dan c) tak seorang-pun akan membaca cerita yang berkata: "Isu dibawah akan kami paparkan secara kompleks...".
10. Jadi peraturannya begini. Sebuah cerita/tulisan/artikel akhirnya hanya akan berkata satu hal yang besar. Jika (contohnya) Anda ingin mengambil empat

cerita yang berbeda untuk satu pernyataan besar tulisan. Anda boleh mengambil bagian-bagian kecil dari tiap cerita itu, namun tidak boleh lepas darisatu pernyataan naratif yang Anda telah tetapkan sebelumnya.

11. Dari beberapa pengamatan. Jangan pernah memulai menulis jika Anda belum bisa menentukan pernyataan besar apa yang akan jadi nantinya, dan mengatakannya pada diri Anda hanya dalam satu kalimat. Lalu tanyakan pada diri Anda bagaimana caranya nenek Anda mau menyimak kalimat tersebut selama lebih dari satu milisekon sebelum dia kembali dengan hobi menyulamnya. Sama halnya jika Anda ingin memposting artikel dalam blog, perhatianyang sama mungkin akan Anda dapat dari salah satu jutaan pengguna internet - maka perhatikan baik-baik dalam menyusun kalimat pertama itu. Sering kali - namun tidak selalu - itu menjadi kalimat pertama dalam artikel Anda.
12. Kalimat pertama - intro, pengantar - yang ideal akan selalu ada bagi Anda. Akan sangat membantu jika Anda memikirkan ini sebelum memulai menulis, karena nantinya kalimat berikutnya yang mengiringi akan bermunculan dengan cepat. Ini bukan berarti Anda terlalu 'berkata-kata', 'bertele-tele', 'tidak fokus', atau 'berlagak pintar'. Namun tidak juga 'berbakat'. Itu hanya menunjukkan Anda mendapat kalimat pertama yang tepat.
13. Kata-kata seperti 'berkata-kata', 'bertele-tele', 'tidak fokus', atau 'berlagak pintar' bukanlah hinaan bagi jurnalis. Yang melandasi orang membayar untuk sebuah koran, majalah, atau browsing blog di internet ialah karena kita ingin informasi yang meluncur ke benak kita dengan mudah dan nyaman, tanpa footnote, daftar referensi yang hambar, bahkan footnote dalam footnote. Namun tetap tergantung target Pembaca Anda, khususnya dalam bahasan ilmiah.
14. Kata-kata seperti 'sensasional' ataupun 'biasa saja' keduanya bukan hinaan ataupun pujian bagi penulis. Kita membaca bacaan - cerita wayang, novel Lupus, komik Doraemon, sejarah politik Indonesia, buku teks Biologi - sesuai dengan selera humor, romans, ironi atau kesenangan kita. Jurnalisme yang baik juga akan memberi Kita sensasi baik humor, kesenangan, iba atau semangat.
15. **Kata memiliki makna**. Cari mereka dalam kamus, lihat dimana mereka biasa muncul. Lalu gunakan mereka dengan sesuai. Jangan paparkan kepenulisan Anda dengan memaparkan ketidakpedulian kita. Jangan gali tanah tandus keras tanpa mengetahui bagaimana menggali tanah tandus keras.
16. **Kata Klise** - hindarilah kata, frase, atau opini yang berulang penggunaanya dan mengurangi orisinalitas tulisan. Kecuali dalam penempatan kata klise yang sesuai. Anda akan heran bagaimana sebuah klise bisa bermanfaat, dalam penekanan yang tepat. Dalam konteks jurnalistik, terkadang Anda tidak harus selamanya pintar namun harus selamanya lugas (sangat klise).
17. **Metafora itu baik**. Namun, jangan, jangan masukkan metafora yang konyol. Para pengumpul aspirasi rakyat di tingkat Propinsi Banten sempat mengangkat sayembara untuk mencari siapakah dikalangan penyumbang suara yang berwajah mirip dengan tokoh wanita pemegang tongkat kegubernuran saat ini. Mengerti?
18. **Hati-hati dengan kredibilitas kaki lima.** Ketika penjual bakso melihat tukang copet ditengah pasar hanya kata-kata sederhana terucap olehnya

antara lain: copet, topi merah, rambut gondrong. Namun didukung suara lantang, mata melotot, tangan menunjuk seseorang memakai topi merah dan rambut panjang. Hati-hati, bahasa tulisan tidak memilik aksen, tidak ada alunan nada menegaskan ironi, komedi, marah, atau takut. Tulisan harus tegas, jelas dan lugas. Untuk tegas dan jelas ikutilah tatanan bahasa Anda.

19. **Hindari kata yang panjang dan tidak masuk akal.** Hati-hati menggunakan jargon. Untuk yang ini sudah pasti penting penting jika Anda penulis ilmiah. Jika anda penulis ilmiah, mau tidak mau Anda akan memaparkan kata-kata yang mana tak seorang-pun di dunia pernah dengar seperti: fekunditas, resilien, pertumbuhan lateral, zooxanthellae, iterasi, diferensial, distribusi gausian. Dengan ini berarti Anda tidak perlu selalu bergelora dan bersahaja. Merasa senang dan sederhana sudah cukup
20. Ingat selalu kapan kita tidak perlu merangkai kalimat puitis dan menirukan tatanan bahasa alkitab.
21. Ingat, orang akan lebih merespon sesuatu yang dekat dengan mereka. Masyarakat Indonesia akan lebih merespon dampak krisis ekonomi terhadap gejolak politik lokal, ketimbang pemilihan perdana menteri Australia.
22. Baca. Bacalah berbagai ragam bacaan. Baca kisah Siti Nurbaya, baca puisi dari W.S. Rendra, baca artikel jurnal Science, baca novel J.K. Rowling, baca novel Lupus, dsb. Lihat berbagai macam hal menakjubkan yang bisa kita buat dengan kata-kata. Lihat bagaimana mengagumkan mereka menata kata dalam separuh halaman.
23. Hati-hati dengan definitif. Kalimat "Beliau sebagai kandidat politik merupakan sosok yang kuat, tua, berpengalaman, dan cekatan dalam masalah pengelolaan partai maka..." bisa Anda persingkat dengan "Beliau memulai karir politiknya sejak 1947 sesuai catatan kepengurusn partai maka... ". Gunakan referensi, terkhususkan bagi yang menulis artikel dalam konteks ilmiah.
24. Ada beberapa hal jika diutarakan terasa enak namun situasi tidak memperkenankannya untuk ditulis. Dalam Yahoo! News 'Indonesia rentan akan pemanasan global', namun dalam sebuah jurnal ilmiah 'Ancaman baru bagi lingkungan laut Indonesia: peningkatan rata-rata temperatur permukaan bumi'. Selalu coba dan usahakan mengatur kata agar sesuai dengan konteks permasalahan, namun tetap melihat Pembaca dan media dimana kita melepas tulisan Kita.
25. Penulis memiliki tanggung jawab, tidak hanya dalam hukum saja. Selalu berorientasi pada kebenaran. Jika dirasa sulit, berorientasilah pada kesetaraan, dan kesadartahuan akan selalu adanya sisi lain dari sebuah cerita. Hati-hati dengan pernyataan yang obyektif. Inilah yang disebut dengan 'dodgy'. Anda mungkin bisa mengatakan bahwa terumbu karang bisa beradaptasi dengan peningkatan suhu pemanasan global, namun jangan katakan mereka bisa bertahan dari pemanasan global. Kenyataanya akselerasi suhu rata-rata global lebih cepat dari kapasitas mereka beradaptasi. 'beradaptasi' dan 'bertahan' keterkaitan mereka memang bisa dikendalikan obyektifitas kita.

Referensi: *The Hands-On Guide for Science Communicators: A Step-by-Step Approach to Public Outreach* oleh Lars Linberg Christensen

Lampiran 14. Tips menulis Jurnal Ilmiah

Senin, 2009 Juni 29

Apakah menulis itu sulit? Pasti banyak pendapat untuk menjawab pertanyaan ini. Mungkin bagi sebagian besar orang (termasuk saya juga), menulis bukanlah hal yang mudah, apalagi menulis karya ilmiah.

Saya cuma sekedar ingin sharing saja, karena saya memang bukan ahli menulis di bidang karya tulis ilmiah, hanya saja sekarang saya memang lagi berkecimpung di dunia tulis menulis yang "berbau" karya ilmiah.

Untuk menulis artikel ilmiah khususnya untuk dimuat di jurnal, penting bahwa artikel yang diteliti merujuk pada sumber-sumber pustaka yang up to date, contoh sumber pustaka yang up to date dan tersedia dalam jumlah yang cukup banyak adalah artikel jurnal. Untuk penelitian yang sulit mendapatkan referensinya mungkin bisa dilakukan wawancara dengan pakar atau juga melakukan penelitian.

Isi dari jurnal pada umumnya sama dengan karya ilmiah pada umumnya, ada abstrak, pendahuluan, kajian pustaka, tinjauan pustaka, metodologi, hasil dan pembahasan, kesimpulan, dan referensi.

Abstrak berisi intisari artikel yang ditulis, meliputi ringkasan latar belakang, penekanan tujuan dan rumusan permasalahannya, metode, dan juga kesimpulan. Pada akhir abstrak, penulis juga diminta untuk memberikan kata kunci, yaitu kata yang sering muncul dan menjadi penekanan penelitian/penulisan.

Pendahuluan berisi latar belakang yang menceritakan alasan kita tertarik untuk melakukan penelitian dan penulisan. Selain latar belakang, pendahuluan juga membahas rumusan masalah, tujuan dan manfaat penelitian. Rumusan masalah umumnya dinyatakan dalam kalimat pertanyaan (namun tidak harus kog), dan berisikan fokus penelitian.

Seringkali kita bingung antara tujuan dan manfaat. Tujuan adalah hal yang ingin dicapai dari penelitian/penulisan, misalnya, tujuan penelitian ini adalah ingin mengetahui apakah ada perbedaan antara x dan y. Sedangkan manfaat ya berbicara mengenai manfaat yang diberikan oleh penelitian/penulisan yang dilakukan, misal penelitian ini bermanfaat untuk memberikan masukan kepada x mengenai y.

DIPOSKAN OLEH CHRISTINA DI 23:55
LABEL: KEEP WRITING AS A SIMPLE THING

Lampiran 15. Tips For Writing A Journal Article

Rachel Petkewich
Chem. & Engineering News. August 13, 2007 , Volume 85, Number 33 pp: 46-49

Tip 1. Conduct thorough literature searches and cite precedents.
"Good literature searching allows you to provide a cogent paper that is well-thought-out and well-organized, and it also keeps you from embarrassing yourself," says analytical chemist W. Jeffrey Hurst at the Hershey Co. For example, it behooves you to discover earlier rather than later "that what you thought was seminal work has been reported on 12 times" already, he says.

Tip 2. Read scientific literature for content and style.
Study lots of articles for technical material, but keep an eye out for particularly clear writing styles and incorporate them into your work, says catalysis chemist Gregory C. Fu at Massachusetts Institute of Technology. Crystallographer Anthony L. Spek at Utrecht University, in the Netherlands, also suggests reading well-written papers in the specific journals you want to publish in.

Tip 3. Clarify authorship carefully.
Sometimes the authorship is straightforward; sometimes it's not. Authorship on journal articles can become an ethical issue, and in certain cases, disputes have cost scientists their jobs and reputations. "Be meticulous and make sure that authorship is correct," recommends Sean B. Seymore, a professor of patent law at Northwestern University who holds a doctorate in chemistry and has written about authorship abuse (http://law.richmond.edu/jolt/v12i3/article11.pdf).

Tip 4. Get organized now.
Most authors develop a plan for organizing a paper sometime near the end of completing the lab work. Some researchers pull out the original research grant proposal, scribble the main points on a whiteboard, or take a stab at an abstract.
Other authors use writing as a tool to guide their research. Chemist George M. Whitesides at Harvard University advocates early outlining so strongly that he wrote a paper about it (*Adv. Mater.* **2004,** *16,* 1375).
A former Whitesides postdoc, Teri W. Odom, adopted the process for her materials research group at Northwestern University. "The principle of the Whitesides' paper-writing process—that outlines and drafts should be constructed in the course of solving a problem rather than after all the data have been analyzed—has been useful."
She says her group will often go through about eight outlines before drafting the manuscript. As an exercise, Odom also requires students to complete a fully referenced paragraph written in the *Nature* format (www.nature.com/nature/authors/gta/Letter_bold_para.doc).

Tip 5. Allow months for revision.
Cornell University chemistry professor Roald Hoffmann, a Nobel Laureate, goes through many drafts of a manuscript with his students. "A typical number is 23," he says.

Tip 6. Know your audience.

Nonspecialists will read your journal article. Hoffmann advises scientists to "write the manuscript for an intelligent graduate student, not a professor."

When writing up interdisciplinary work, take nothing for granted and explain everything, says University of Iowa physical chemist Vicki H. Grassian, who works on environment-related surface science and nanotechnology. For example, she has had reviewers repeatedly question particular calculations for atmospheric reactions that have been "routinely done in heterogeneous catalysis for more than 50 years," she says.

Tip 7. Tell clear and concise stories.

Many researchers refer to journal articles as the "stories" of their research. No one likes a long-winded, disorganized, tangential, and confusing story. Chemists and engineers suggest focusing on critical content and succinct sentences. "Create no mysteries—those that nature provides are sufficient," Hoffmann says.

Tip 8. Seek help with grammar and language.

"One often hears that English has become the de facto language of science," says Patrick H. Vaccaro, a physical chemist at Yale University. "As a reviewer for several journals, it often seems more appropriate to state that 'bad English' has become the lingua franca of modern science." Vaccaro and other professors direct both native and nonnative English speakers with poor basic writing and grammar skills to university writing centers and language classes.

Tip 9. Learn from the best.

Graduate and postdoctoral advisers are just two sources of writing advice. "Don't be afraid to ask other researchers who have been successful in achieving top-tier publications and funding or who are known as good writers to review your material," says chemical engineer Thomas H. Epps III at the University of Delaware.

Tip 10. Find several readers.

Journal articles contain a few big concepts and many small details that an author could miss. Gabriela C. Weaver, a chemical education researcher at Purdue University, pairs up her graduate students as "writing buddies." They read each other's work before she provides comments. Utrecht University's Spek sends his manuscripts to colleagues who are not coauthors so they can comment on them before he submits them to journals.

Because mistyping a number can cast doubt on the rest of the results, organic chemist Roman Dembinski at Oakland University in Rochester, Mich., has every member of his group proofread each manuscript—whether they are authors on it or not. Chemist Thomas Higgins of Chicago's Harold Washington College points out that "colleagues in the humanities make good proofreaders."

Tip 11. Write often.

Chemists say putting down just one paragraph of observations each day can help improve writing. "Get as much experience writing as you absolutely can," says Cynthia S. Dowd, who recently joined the chemistry faculty at George

Washington University. "Some PIs don't 'allow' you to write, but take a stab at writing the experimental section, introduction, results, and discussion anyway."

Tip 12. Try different genres.

Writing for the layman about nonscience topics can be a fun and helpful way to improve your writing. For example, Michelle Francl, a theoretical chemist at Bryn Mawr College, in Pennsylvania, has published essays on topics ranging from parenting to music. Hoffmann has published so many scientific and literary works, among them poems and plays, that he now describes himself as a "theoretical chemist and a writer."