

Nice, November 6, 2012.

Dear Inger Marie and Mikkel,

Thank you for accepting my article entitled *Building students' knowledge one click at a time* for LOM 10. Thank you also for the few extra days to submit this revised version, while I was delayed by matters beyond my control.

Please find my point-by-point responses below to the issues you and the referees raised [\(in Track Change Review mode on Microsfot Word\)](#), in addition to the revised original manuscript.

Best wishes,
Quentin

- Abstract: In your abstract, please sum up the purpose of the article, the main points and the conclusions.

Done.

- Please add an introduction in which you describe the purpose of the article and outline the structure and contents of it.

The first section which started with the heading "On lectures, technology and learning" WAS the Introduction. See here for another example of such a format: <http://www.sciencedirect.com/science/article/pii/S0968000405003403>

I replaced the heading by 'Introduction: On lectures, technology, and learning' for clarity. I rewrote part of this section but I am afraid that adding yet another paragraph that would expose what is already in the Abstract would break the flow of a "really good start which gives good motivation for further reading" (comment by reviewer A).

- There is a large number of embedded links in the text. Please reference these according to the APA style in the bibliography.

Done. That skipped my attention in the guidelines, probably from an issue in understanding the Danish language!

- Via external links, you refer to a number of good points relating to how clickers can enhance the learning of students. Please elaborate on some of these points, for example the effectiveness of peer instruction and students' knowledge construction, in the article itself.

I added explicit links to what the reader might specifically read or watch in the associated references, in particular throughout the Peer Instruction section. I added references suggested by Reviewer A and also related in general to knowledge construction and learning theory.

Most of the 'good points' the reviewers probably refer to were actually already in Box 2 (now Box 1) but I realized a reference to this Box was not made explicitly in the text, which probably accounted for part of the confusion! I have corrected that and emphasized how more practical matters and further discussions of the points in the main text can be found in Box 1.

- Both editors and reviewers are looking forward to an article on your own experiences and students' experiences in this field. If possible, you are very welcome to integrate any such experiences already at this stage.

Adding results from our own experience is the purpose of including specific examples in the 'Creative use' section and of including figure 3.

I expanded further by including two paragraphs in the section about 'Clickers as a technology to promote learning' (second and third paragraphs) that share

feedback from both lecturers and students that we and colleagues collected after the introduction of clickers at our Faculty. As the focus of our efforts has been mostly development and not research, I am afraid this is the extent to which we can confidently share data.

- Please proofread the article to secure a consistent tone and style.

Done (native English speaker Chrysa Latrick in the Acknowledgements).

Bedømmer A:

Kategori:

Praksisbaseret artikel

Redaktionel status:

Mindre bearbejdning påkrævet

Formaliastatus:

Mindre rettelser påkrævet

1. Problemstilling og formål med artiklen

a. Hvad fungerede godt?

b. Hvad kunne gøres bedre?

:

a) The goal and the problem appear evident throughout the article. In addition, does the initial problematization of the classic passive lectures. It is a really good start which gives good motivation for further reading on student response systems.

b) The author emphasizes in the introduction, "... the process of assimilation of that information." But one could also argue that learning includes accommodative learning processes (Piaget) and in addition that these more challenging learning processes can be enabled through peer argumentation triggered by the use of student response systems

For sure accommodative learning processes can get into play in some cases. But for the scope of the current discussion, considering that most learning proceed by assimilation is sufficient. A reference to a review by Illeris was added and the text was rephrased from "Learning therefore represents" to "The most common form of learning therefore represents" (bottom of page 3).

2. Belysning af artiklens metodiske og teoretiske grundlag

a. Hvad fungerer godt?

b. Hvad kunne gøres bedre?

:

a) The methodological and theoretical basis of the article works well. Especially with regard to the many interesting references for peer learning and the use of student response systems in different contexts

b) In the section on peer instruction it could be nice also to get answers to why peer instruction seems to promote learning. Especially because it is emphasized that students should try to convince fellow students about their answers. One option is for example by linking to the concept of "socio-cognitive conflict" (Pierre Dillenbourg (1996) - The evolution of research on collaborative learning or Doise, W. & Mugny, W. (1984) The

Social Development of the Intellect)

Thank you for the feedback. I added such references into the main text (see section on Peer Instruction).

3. Artikkens omfang og klarhed af det empiriske materiale

- a. Hvad fungerer godt?
- b. Hvad kunne gøres bedre?

:

a) Reference is made accurately and brief to empirical articles, which works well in the article. The article contains no empirical studies but only references to such studies

b) Maybe some more in-depth descriptions of the points referred to in some of the many references.

I developed further some references in order to be explicit about what the reader should expect to find in these particular references (see in particular the Peer Instruction section).

4. Artikkens argumentation og analyser (tilstrækkelighed)

- a. Hvad fungerer godt?
- b. Hvad kunne gøres bedre?

:

a) It is easy to follow article's reasoning and analysis. In general, the analysis seem to be sufficient

b) In the section on peer instruction it could be nice also to get answers to why peer instruction seems to promote learning. Especially because it is emphasized that students should try to convince fellow students about their answers. One option is for example by linking to the concept of "socio-cognitive conflict" Pierre Dillenbourg (1996) - The evolution of research on collaborative learning, <http://tecfa.unige.ch/tecfa/publicat/dil-papers-2/Dil.7.1.10.pdf> Doise, W. & Mugny, W. (1984) The Social Development of the Intellect and P. Jermann & P. Dillenbourg Elaborating New Arguments Through a CSCL Script <http://edu.fss.uu.nl/medewerkers/ja/Confrontations/Ch8.pdf>

Same comment as for point 2 above. I did add one of the references mentioned in the same section of the article on Peer Instruction.

5. Artikkens refleksioner, konklusioner og anbefalinger som følge af diskussion/analyse af det empiriske materiale

- a. Hvad fungerer godt?
- b. Hvad kunne gøres bedre?

:

a) The various examples and reflections on the appropriate didactic use of clickers are clearly described and seems good

b)

6. Artikkens forholdelse til eksisterende litteratur og/eller erfaringer på området

a. Hvad fungerer godt?

b. Hvad kunne gøres bedre?

:

a) The article has many good references for both the technical and didactic aspects of the use of clickers. This works well in the article. The article itself contains no empirical studies but empirical studies are presented short and precise through the many references.

b) Maybe some more in-depth descriptions of the points referred to in some of the many references.

Same comment as in point 3 above. I developed further some references in order to be explicit about what the reader should expect to find in these particular references (see in particular the Peer Instruction section).

7. Artikkens indhold af nødvendig baggrund og kontekst for emnet/casen

a. Hvad fungerer godt?

b. Hvad kunne gøres bedre?

:

a) Both the article's introduction and in the different cases you get good descriptions of the general context in terms of the value of clickers as well as the more specific context associated with individual cases

b)

Hvor relevant er artiklen i forhold til tidsskiftets specifikke tema?:

5 (i høj grad)

Hvor relevant er artiklen i forhold til tidsskriftets generelle fagområde?:

5 (i høj grad)

Formalia

Er artiklen logisk og overskueligt opbygget?

:

5 (i høj grad)

Formulerer forfatteren sig klart og let læseligt?:

5 (i høj grad)

Er grammatik og tegnsætning i orden?:

4

Er der tilstrækkelige og korrekte litteraturhenvisninger?:

5 (i høj grad)

Følger artiklens referencer og litteraturliste APA-standarden (<http://www.apastyle.org/>)?:

3

Følger artiklen retningslinjerne for layout?:

3

Hvis artiklen inkluderer eller benytter multimedier (fx podcast, Flash):
Egner formen sig til formidlingen af artiklens indhold?:

Uddybende kommentar vedr. formalia:

Generel vurdering

Hvad er artiklens styrker?

:

It works well that the article clearly describes the learning value of using clickers. In addition, there are a number of good concrete examples of appropriate didactic use that highlights the student's knowledge construction

Hvad er artiklens svagheder?:

It could be really nice if the author had made an empirical study, which could be referred to. In particular, it would be interesting to hear about the experience of students using clickers in the different cases. Maybe some of the references used include interesting quote's from students involved in some of the cases

[Done. See paragraphs #2 and #3 in the first section on "Clickers".](#)

Hvad er dine anbefalinger til forfatteren?:

That the author can see the purpose of the feedback given and will try to incorporate this. Most importantly, it could be nice with an elaboration of how the students' knowledge construction can be explained in the two cases respectively peer discussion and peer instruction. The feedback above refers to possible theoretical references.

Bedømmer B:

Kategori:

Reportage

Redaktionel status:

Mindre bearbejdning påkrævet

Formaliastatus:

Mindre rettelser påkrævet

Problemstilling og formål med artiklen

a. Hvad fungerede godt?

b. Hvad kunne gøres bedre?

:

a) Gives an interesting review of some the ways that "clickers" can be used.

b) The purpose isn't clear enough. This is in part due to the abstract not really reflecting the content. In part, it is due to the article trying to cover too much ground.

The Abstract was clarified to emphasize the double-purpose of the article, which is to give some foundational pedagogy for clicker users, as well as a summary of the current technologies they might want to choose to use. This double-focus is in line with the double scope of this issue of LOM: "Contributions can touch upon both pedagogic, organisational, technological and/or strategic considerations concerning the application, development and implementation of technologies as well as studies of the effect and spread."

"

Belysning af artiklens metodiske og teoretiske grundlag

a. Hvad fungerer godt?

b. Hvad kunne gøres bedre?

:

Artiklens omfang og klarhed af det empiriske materiale

a. Hvad fungerer godt?

b. Hvad kunne gøres bedre?

:

a) there are interesting results about clickers vs. apps for polling.

b) Figure 3 are the only original results reported. They are interesting, and perhaps more emphasis should be placed on this? If not, the authors should consider a report on these results to an international journal.

More "data" was added to reflect the positive responses to the introduction of clickers, from both the lecturers and the students sides. The review format is appropriate in my view to report on results that are of interest but that have not been obtained as part of an educational research endeavor.

Artiklens argumentation og analyser (tilstrækkelighed)

- a. Hvad fungerer godt?
 - b. Hvad kunne gøres bedre?
- :

Artiklens refleksioner, konklusioner og anbefalinger som følge af diskussion/analyse af det empiriske materiale

- a. Hvad fungerer godt?
 - b. Hvad kunne gøres bedre?
- :
- a)

Artiklens forholdelse til eksisterende litteratur og/eller erfaringer på området

- a. Hvad fungerer godt?
 - b. Hvad kunne gøres bedre?
- :
- a) There is a reasonable breadth to the references, both to the literature and to more anecdotal experience.

Artiklens indhold af nødvendig baggrund og kontekst for emnet/casen

- a. Hvad fungerer godt?
 - b. Hvad kunne gøres bedre?
- :

Hvor relevant er artiklen i forhold til tidsskiftets specifikke tema?:

Hvor relevant er artiklen i forhold til tidsskriftets generelle fagområde?:

Formalia

Er artiklen logisk og overskueligt opbygget?

:

Formulerer forfatteren sig klart og let læseligt?:

3

Er grammatik og tegnsætning i orden?:

3

Er der tilstrækkelige og korrekte litteraturhenvisninger?:

1 (i ringe grad)

Følger artiklens referencer og litteraturliste APA-standarden

(<http://www.apastyle.org/>)?:

1 (i ringe grad)

Følger artiklen retningslinjerne for layout?:

Hvis artiklen inkluderer eller benytter multimedier (fx podcast, Flash):

Egner formen sig til formidlingen af artiklens indhold?:

Uddybende kommentar vedr. formalia:

References (formality): the author should follow the correct procedure for

citing web sites. Links (embedded in the text) is not sufficient for an academic work.

References to books should include page numbers for the specific citation.

[The reference list was adjusted to include URLs and to conform to the APA style.](#)

Generel vurdering

Hvad er artiklens styrker?

:

The article gives some useful tips on various methods for using "clickers" as a teaching/learning tool.

Hvad er artiklens svagheder?:

There is very little original content. The tone shifts between formal academic writing and informal "story telling". A more consistent style would be helpful.

[The text was rewritten and partly reorganized to ensure a consistent flow.](#)

The article promises to answer questions it does not answer. The abstract should be rewritten to more accurately reflect the fact that the questions are discussed. Example: "how many times per lecture should clickers be used" The answer to this question depends on at least some of the following factors: subject, academic level of students, number of students, style of

teaching, time allotted for lecture/recitation/lab, particular subject matter of given lecture. Some of these issues are touched on, but the question is not "answered". This is not a surprise as a true discussion of any of the four questions in the abstract would be a large work in and of itself.

[The answers were actually in Box 2 \(now Box 1\) which was not properly referred to in the main text. This is now corrected.](#)

[The Abstract was also modified to focus on core questions related to the use of clickers in higher education.](#)

Hvad er dine anbefalinger til forfatteren?:

Have a native speaker of English edit the manuscript. There are a few too

many minor errors. I am sorry that I do not have time to edit the document to give more concrete language suggestions.

Rewrite the abstract to reflect the content.

The do's and don'ts, should be more suggestions than "rules". Most of them are good ideas, but there is no reason (other than taste) to specify, for example 3-4 questions per hour.

[3-4 questions per hour is a good aim for first-time clicker users. The corresponding section in Box 1 was slightly edited to emphasize the relevance for that target group.](#)

The author references the "first European conference for clicker users", but this was more a commercial workshop for users of a particular brand of clicker. The fact that one of the leading experts in the field, Mazur, is their "celebrity spokesperson" does not make this more than a commercial event.