Gmail **Amy Rae Fox <amyraefox@gmail.com>**

Diagrams 2016 notification for paper 50

Diagrams 2016 <diagrams2016@easychair.org> Tue, Mar 15, 2016 at 12:10 AM
To: Amy Fox <amyraefox@gmail.com>

Dear author(s),

We are pleased to inform you that your short paper submission “Exploring Representations of Student Time-Use” has been accepted for
presentation as a short paper at Diagrams 2016.

In order for your paper to be included in the proceedings, one of the authors must register to attend the conference before 13 May, 2016:

http://www.diagrams-conference.org/2016/registration

Please prepare the final version of your paper, taking into account the reviewers’ comments below, and the instructions for formatting the camera-ready copy, provided on the Springer web site:

http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0.

This site has Latex source files (preferred) and exemplars for Word. Please ensure that you use the correct source files as this will help us prepare high-quality proceedings. Please remember that the page limit for a short paper is 7 pages.

Please zip together the four files listed below and submit to us via EasyChair before 8th April 2016.

1. The final source files for your paper, including any non-standard fonts;

2. A final PDF corresponding exactly to the final source files specified in (1);

3. A Springer copyright form, signed by one author on behalf of all authors of the paper.
(Available from ftp://ftp.springer.de/pub/tex/latex/llncs/LNCS-Springer_Copyright_Form.pdf)

4. A plain text file containing the following information:
- The name and e-mail address of the contact author who will check the proof of the paper;
- A suggestion for an abbreviated running head, if appropriate;
- Information about the correct representation of authors' names, where necessary.

We would also like to update you on some conference information:

1. We will be running a Graduate Symposium, so if you are a graduate student or you are supervising one, please encourage them to submit to the Graduate Symposium at Diagrams 2016 (deadline: 21 March 2016). We have secured financial support from the NSF for all graduate students - see details here:

http://www.diagrams-conference.org/2016/gradsymp

2. As part of Diagrams 2016, the International Workshop on Set Visualization and Reasoning (SetVR 2016) will take place. Please consider submitting (deadline: 11 April 2016):

https://sites.google.com/site/setvr2kn/current-workshop

Congratulations on the acceptance of your paper. We look forward to seeing you at the conference in Philadelphia.

Yours sincerely,
Mateja Jamnik and Yuri Uesaka
PC co-chairs Diagrams 2016

---------- REVIEW 1 ----------

PAPER: 50
TITLE: Exploring Representations of Student Time-Use
AUTHORS: Amy Fox, Erica de Vries, Laurent Lima and Savannah Loker

OVERALL EVALUATION: 2 (accept)

---------- REVIEW ----------
This study investigated students' diagrammatic representations of their time use during a typical week. Analyses of the diagrams that students produced revealed preferences for use of space, form, and mechanisms for representing components of time use. The findings make a useful contribution to further understanding student use of diagrams in knowledge representation. As the authors pointed out, the diagrams that the students produced also provide clues about their conceptualizations of time, and could have applications for assisting students to better manage their use of time.

Generally, the paper is well written and easy to understand. There are, however, a few issues that I think the authors should address in revising their paper, which I list below.

1. The Abstract should mention what the key findings of the research were.

2. In the Method section, the coding scheme used should be explained in a bit more detail. At the moment, the scheme is a bit vague and it is hard to imagine the categories "defined in response to the research questions", as well as the operational definitions that were developed. I think that including some examples could help. Also, it is unclear whether "in alignment with Tversky's discussion of space and time" refers to the categories or the questions.

3. The references are incorrectly numbered: the sequence of numbering should be according to citation in the text (first citation = 1) rather than alphabetically.

It is also interesting to note the high degree of "spontaneous" diagram use that the students demonstrated in this study – in contrast to previous papers published by Manalo and Uesaka, in which they reported low spontaneous use of diagrams when students were asked to explain information they had learned. The difference could have been due to the kind of information to be represented (use of one's own time could be higher in imageability compared to the mechanisms of CD music production or of the heart?) and/or to instructions provided: Although in the present study the authors did not specify what representations the students should use, they provided the students with "a variety of pens and colored pencils" – which might have implicitly conveyed to the students that they should draw rather than write. I think this difference in degree of spontaneous diagram use warrants at least some attention in this paper.

---------- REVIEW 2 ----------
PAPER: 50
TITLE: Exploring Representations of Student Time-Use
AUTHORS: Amy Fox, Erica de Vries, Laurent Lima and Savannah Loker

OVERALL EVALUATION: 2 (accept)

---------- REVIEW ----------
This is an interesting paper and we recommend its publication.
The main difficulty of the text is that conclusion is not strongly evidenced, so the paper is not as decisive as one might wish, but it is still interesting enough and the topic certainly deserves further exploration. The difficulty concerns the interpretation of the diagrams. The authors ask in section 4.1 whether the preference of linear patterns means that students conceptualise their time as linear. The authors do not openly answer to this question. They merely offer some explanations, notably by Tversky, as to why students prefer linear patterns. So the authors did not openly claim that students do conceptualise their time as linear, and if so, certainly did not give any conclusive arguments to support such a view. Sure we might agree with Tversky that the drawings indicate an underlying thought, but it is not clear yet what that thought would be. The fact that students draw lines instead of circles does not necessarily mean that they conceive their use of time as linea!
r. That´s certainly a worthy hypothesis to work on, but we regret that the authors did not try to evidence it or question it. This claim is simply taken for granted in the conclusion where we are told that it would be beneficial to draw student´s attention to the cyclical nature of their schedules. We do not challenge this conclusion; we simply think that the text is not strong enough in its arguments for it. Maybe the organisation of interviews or questionnaires with the students would have been of some help to interpret those diagrams and to have a better idea of the students´ conceptions of time, with all the due methodological reserves, rather than studying the diagrams alone.
Here are some minor remarks:
- On the form, it might have been useful if the authors would have reproduced exactly the instructions they gave to the students. In present state, these instructions are merely described. Also, the diagrams are quite small. Maybe it would have been also useful reproduce all the drawings they got in an appendix. This will extend the paper by some pages but will make an important source for the reader of the paper who wants to make his mind on the issues discussed by the authors.
- The experience was done in a French university. It is well known that many French universities have a program for first-year students devoted to the "methodology of university work" that aims at teaching them how to adapt their working practices to the university context. The management of time is an essential part of such a program, and hence, we wonder whether this experiment

was done as part of that program or not. If not, it is crucial to inquire whether those students who participated in this experiment already attended such a program where they learned to visualise their use of time. This program might have influenced the results of the experiment.
- It is curious that it took three psychology students to code 25 figures. This fact introduces an unnecessary risk of artefact unless the coding was collaborative, but the text is silent on this.
- On page 4, we are told that in Fig 1, “the student assumes the viewer will skip up to the next line and continue reading left-to-right, without the need to provide a formal indicator of direction”. That looks partly incorrect because the figure shows that all lines have arrows from the left to the right. Hence, the student´s assumption concerns only the fact that the reader will skip up to the next line. The reading from left to right is formally indicated by the arrows.

---------- REVIEW 3 ----------
PAPER: 50
TITLE: Exploring Representations of Student Time-Use
AUTHORS: Amy Fox, Erica de Vries, Laurent Lima and Savannah Loker

OVERALL EVALUATION: 1 (weak accept)

---------- REVIEW ----------
The paper presents the results of an interesting user study in which 25 students were asked to represent their time-use for one week on a single sheet of paper. I found the use of different flows - linear, snake and circular - interesting. The paper is logically structured and easy to read.

However I feel that currently the paper spends too much time on the overarching motivation for the research: helping students with their time use. The study itself, while feeding into this, is a separate piece of work and would benefit from being presented primarily as an experiment into spontaneous representations of time. This would also allow more analysis and the inclusion of more examples.