

Teachers' Concerns in the Implementation of Strengthening of Mathematics and Science Secondary Education (SMASSE) Innovation

Caroline Ndirangu cawandi@gmail.com

Dr. Grace Nyagah nyaga_grace@uonbi.ac.ke

Department of Educational Administration and Planning
University of Nairobi
DETA CONFERENCE 1st August, 2013

BACKGROUND TO THE STUDY

- Performance in sciences in Africa has remained low. In Kenya, the national science scores in science have remained well below 50%, 60%, of the students score marks between D and E, and only 8-10% B+ and above.
- As an intervention measure Kenya introduced SMASSE INSET in 1998, but 12 years later the trends in science performance have remained the same.
- SMASSE came up with a learner-centered methodology coined as ASEI/PDSI classroom practices.
- Studies have shown that implementation of an innovation is complex. It may fail either because the innovation is complex or teachers do not value it.
- Yet successful innovation implementation depends upon its acceptance by the targeted end- user.

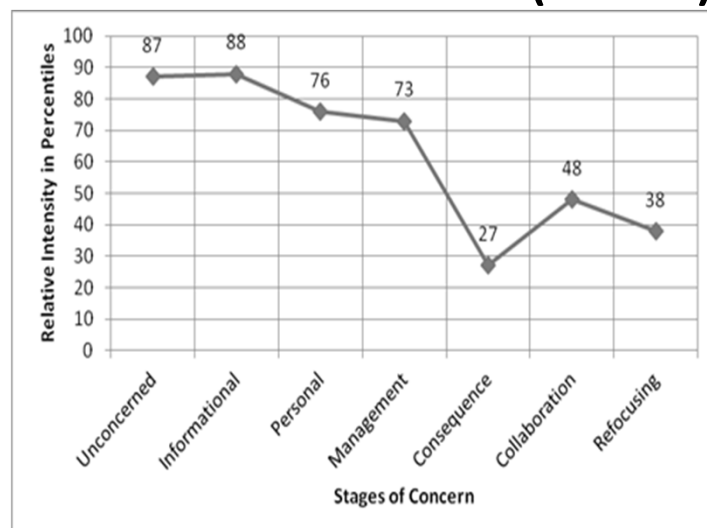
Purpose of the Study	
<p>To establish the;</p> <p>i. Level of implementation of ASEI/PDSI classroom practices</p> <p>ii. Stages of Concern of the implementers of ASEI/PDSI classroom practices</p>	<ul style="list-style-type: none"> • Survey design, sampled 147 science teachers purposively, 68 head teachers and 10 District trainers randomly • Data was collected using a published instrument, the Stages of Concern Questionnaire (SoCQ) which consists of 35 Likert-scale items. • Analysis was done using a “quick scoring device” that grouped their concerns into seven.

Findings on Level of Implementation				
Respondent	Fully %	Partially %	Not at All %	Undecided %
Teachers	15	75	11	n/a
Head Teachers	24	61	3	11

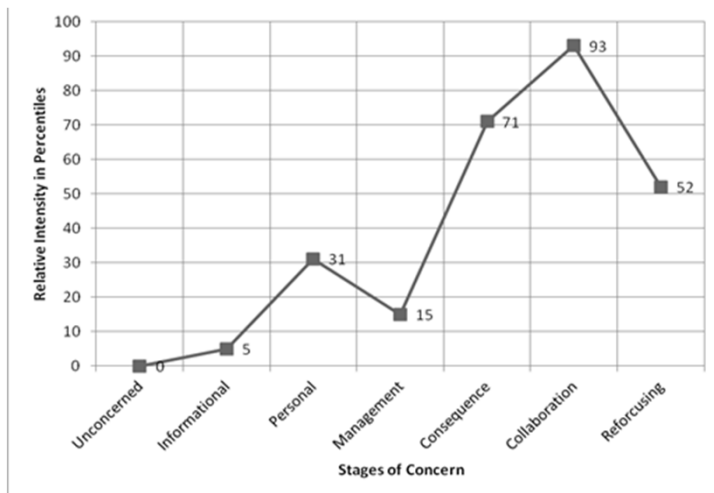
Stages of Concern (SoC)

No.	Seven Stages of Concern	Meaning in the context of this study.
0	Unconcerned/ Awareness	I am not concerned about or aware about the ASEI/PDSI class room practices
1	Informational	I would like to know more about ASEI/PDSI
2	Personal	How will using ASEI/PDSI affect me ?
3	Management	I seem to be spending all my time getting materials ready, lesson planning, practical manuals
4	Consequence	How is the use of ASEI/PDSI affecting the learners performance
5	Collaboration	I am relating what I am doing to other teachers
6	Refocusing	I have some ideas that would work better than ASEI/PDSI

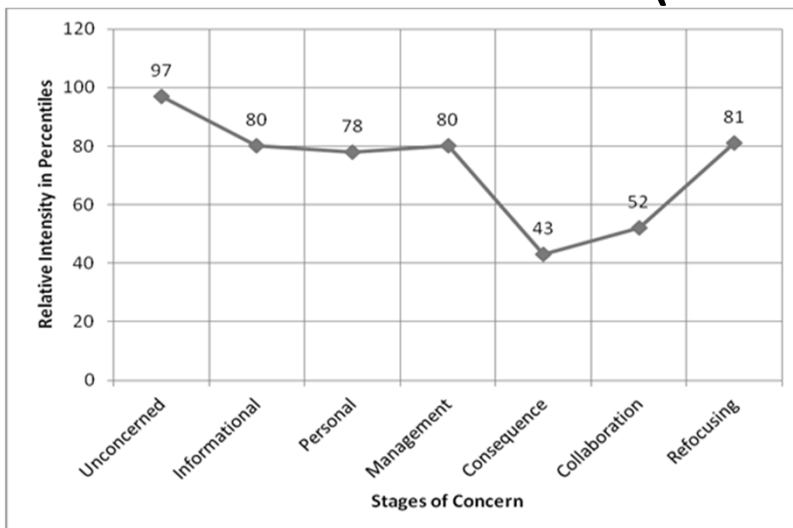
Head teachers' SoC Profile (overall)

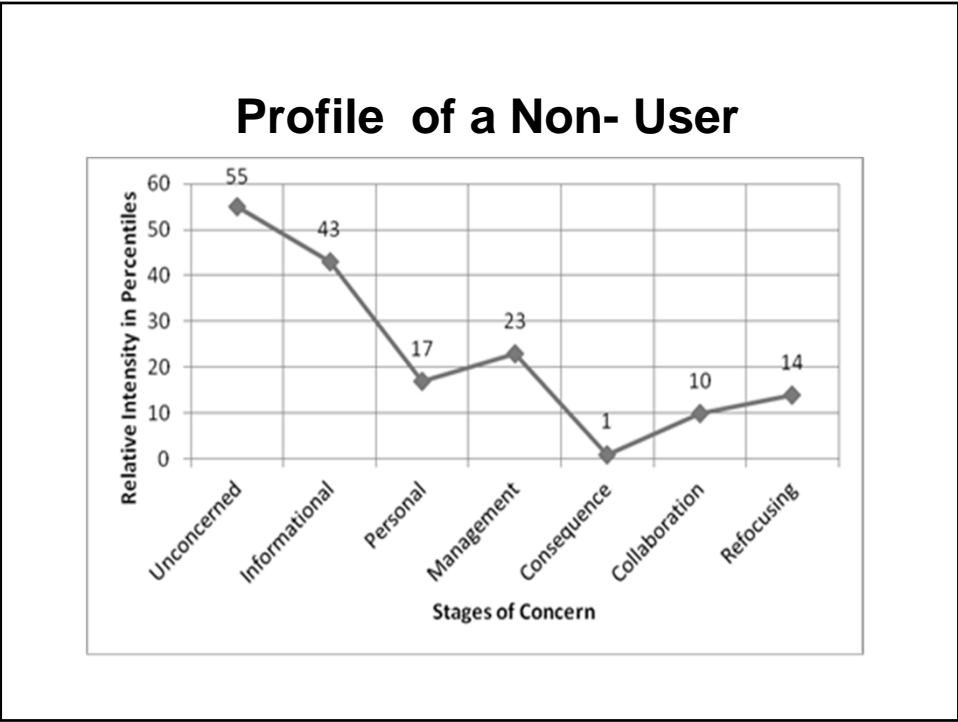


Profile of a User



Science Teachers' SoC Profile (overall)





Conclusions of the Study

Stages of Concern	Head teachers (percentile)	Teachers (percentile)
<i>0. Awareness</i>	97	87
<i>1. Informational</i>	88	80
<i>2. Personal</i>	76	78
<i>3. Management</i>	73	80
<i>4. Consequence</i>	27	43
<i>5. Collaboration</i>	48	52
<i>6. Refocusing</i>	38	81

Recommendations of the Study

- Address the root cause of these concerns. Most of the concerns were traced to the INSET, there is need to assess the training strategies of the trainers or even consider training a new crop of district trainers
- Majority of the teachers were also handling large classes. The teachers therefore indicated they had little time left to prepare the ASEI/PDSI lesson plans.
- Employ more teachers to create balance between the teachers student ratio and to reduce the teaching load.

THANK YOU

ASANTE SANA