Teacher concerns about the outcomes-based reform curriculum in Papua New Guinea

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Abstract

This article presents findings of teacher concerns about implementation of a reform outcomes-based curriculum in rural and remote primary schools in Papua New Guinea. Data are presented from fifty-eight teachers in nine rural or remote schools in the East Sepik and Madang provinces. The instrument used to gather the data was the Stages of Concern Questionnaire derived from the Concerns Based Adoption Model. This enabled the strength of teachers concerns to be measured for seven stages: awareness, information, personal, management, consequence, collaboration and refocusing. For many teachers, they had only received the reform curriculum materials recently, so their concerns were strongest for more awareness of curriculum changes, more information on implications for their practices, and concern for their personal adequacy to adapt to the changes without sustained in-service activities.

Introduction

From 2003 onwards, teachers in Papua New Guinea have been struggling to understand and implement the outcomes-based approach of new syllabuses that have been produced by the National Department of Education. Implementation of the reform curriculum has required teachers to change the way they plan, teach and assess. As part of the author's doctoral research project, she engaged with the methodology of the Concerns-Based Adoption Model (CBAM) (Hall, George & Rutherford, 1986). This is a framework and set of tools for understanding and managing change in people.

Seven assumptions about change underpin the CBAM framework.

Change is a process not an event. The process occurs over time.

Change is made by individuals first.

Change is a highly personal experience.

Change involves multilevel growth.

Change is best understood in operational terms.

Change facilitation must suit individual needs.

Change efforts should focus on individuals, not innovations.

(Hord, 1987:93-96)

In order to focus on helping individuals, it is useful to know what their concerns about the innovation are. One of the tools of the CBAM is a Stages of Concern questionnaire (SoCQ). The Stages of Concern (SoC) describe the affective dimension of change: how people feel about doing something new or

different, and their concerns as they engage with a program or practice which is seen to be most helpful for professional development purpose (Horsley & Loucks-Horsley, 1998:1). Concerns are important because how teachers feel about and perceive a change will in large part determine whether or not change actually occurs in the classroom (Wright, 2002:3). There are four general categories of concern - awareness, self, task and impact - which encompass seven distinct stages.

Stages of Concern

Awareness: The individual either isn't aware of the change being proposed

or doesn't want to learn it.

Informational: The individual has heard of the program, but needs more

information.

Personal: The individual's main concern is how this program will affect

them on a personal level.

Management: The individual's main concern is about the management,

scheduling, etc., of a specific program.

Consequence: The individual's primary concern is how the program will

affect students or how they can make the program work for

their students.

Collaboration: The individual's primary concern is how to make the program

work better by actively working on it with colleagues.

Refocusing: The individual's primary concern is seeking out a new and

better change to implement.

(After Hall, George & Rutherford, 1986:7)

Research question

This paper addresses the question, what are teachers' concerns in relation to implementing the outcome based curriculum policy of the PNG National Department of Education?

Design of the survey

Participants in the survey were primary school teachers in eight rural and remote schools in the East Sepik and Madang provinces of PNG. The schools were Ambunti, Baklo, Drekikir, Mersei, Bongu, Ranara, Saidor and Tauta.Many adventures were experienced whilst trying to reach these schools during this study.

The Stages of Concern questionnaire (SoCQ) from the Concerns-Based Adoption Model was used to identify the concerns that each individual teacher faced in the process of implementing the outcomes-based reform curriculum in their respective schools. There were thirty five items on the questionnaire.

Likert scale responses for each questionnaire item were recorded on a 'SoCQ Quick Scoring Device' (Figure 1).

The Quick Scoring Device was developed to hand score the SoCQ and to plot an individual profile on a graph (Hall, George & Rutherford, 1979:87). The SoCQ Quick Scoring Device has six components where various parts of the data can be entered. Part A consists of the code, for example the date the questionnaire was completed, the site and site code as well as the name of the innovation. Part B is where the numbers circled on the Likert scale were listed under each of the seven stages. Part C consists of the totals from part B. Part D consists of the conversion table from 'five item raw scale score total' to 'percentiles for' each of the seven stages. Part E consists of the percentages which were converted from the totals in part C, using the percentage table from part D. Part F consists of the graph showing the results from part D, the percentages of concern at each of the stages.

Figure 1. SoCQ Quick Scoring Device (Hall, George & Rutherford, 1979)

Findings

Stages of Concern questionnaire (Ambunti)

Nine teachers at Ambunti Primary School completed the Stages of Concern questionnaire and their individual stage of concern percentile scores are listed in Table 1. Codes in the left-hand column represent different teachers. The strongest concerns of each teacher are highlighted.

Ambunti **Stages of Concern Percentile Scores** Manag. Collab. Refocus. Awar. Inform. Personal Conseq. SoC Total J1 J2 J3 J4 J5 J6 J7 J8 Ј9 Group profile N = 9Means 62.

Table 1. Individual stage of concern percentile scores (Ambunti)

The mean scores for the Ambunti teachers indicate general high group concerns for an awareness of the nature of the reforms (Stage 0), the requirements of the new curriculum (Stage 1) and their personal adequacy (Stage 2) to adapt to the changes.

Five Ambunti teachers scored highest for Stage 0. For four of these teachers (J2, J5, J8 and J9), the score for informational concerns was higher than the score for personal concerns. This reflects normal, interested individuals who are somewhat aware of and concerned about the outcomes-based curriculum and are interested in learning more about the reforms from a positive proactive perspective. For the fifth person (J1) who scored highest for Stage 0, the score for personal concerns was higher than the score for information concerns and this indicates possible resistance and doubt. The fears or uncertainties of this person need to be allayed before the person may be willing to engage the reforms in a more substantial way.

Two teachers (J3 and J6) scored highest for the information Stage 1 which indicated that they were concerned about getting more information about the reform curriculum and implications for their practices. It would be anticipated that they were pro-active in showing interest in talking to others about the curriculum materials. Closely related to the Stage 1 score for J6 was the person's score for Stage 5 which indicates that the person was also concerned about coordinating and collaborating with others regarding the use of the reform syllabuses.

Two teachers (J4 and J7) scored highest at the management Stage 3 This indicated that they were concerned about the process and tasks of using the innovation and making best use of information and resources. It would be anticipated that their concerns related to efficiency, organizing, managing, scheduling and time demands for initial use of the materials. Associated with their concerns about managing the demands of the new curriculum, J4 was concerned about having sufficient information (Stage 1) while J7 was having some personal concerns (Stage 2) about meeting the demands.

No-one gained their highest score for higher stages of concern and this is reasonable considering that the reform syllabuses were relatively new to teachers and the nature of the changes were quite complex.

Another recommended way of treating group data is to tally the number of individuals that are high on each stage and this is illustrated in Table 2 for the Ambunti respondents. This gives a clear picture of the range of peak scores within the group. It can be interpreted that the greatest concerns of the group were for more awareness (Stage 0) of the changed nature of the syllabuses by having information (Stage 1) and skills to manage (Stage 3) the tasks required.

Table 2. Frequency of individual highest stage of concern (Ambunti)

Ambunti		Highest Stage of Concern								
Stage	0	0 1 2 3 4 5 6								
Individuals	5	2	0	2	0	0	0			

The results of the stages of concern questionnaire have implications for professional development activities. The greatest need appears to be for information about the reform curriculum and training in how it would affect programming, teaching methods, learning materials and assessment activities. The two teachers who were at the more advanced management stage could be identified as leaders to facilitate learning by other teachers.

Stages of Concern questionnaire (Baklo)

Baklo is a small rural school in the East Sepik Province. At the time of my visit, the school had four teachers and about 100 students. Two teachers at Baklo Primary School completed the Stages of Concern questionnaire.

Table 3. Individual stage of concern percentile scores (Baklo)

Baklo			Stages	of Concern	Percentile	Scores				
	Awar.	ar. Inform. Personal Manag. Conseq. Collab. Refocus.								
SoC	0	1	2	3	4	5	6	Total		
Ba1	53	57	52	23	8	25	57	27		
Ba2	53	48	39	27	2	7	9	6		
		Group profile N = 2								
Means	53	52	45	25	5	16	33	17		

The mean scores for the Baklo teachers indicate general intense concerns similar to those for Ambunti, that is, higher concerns at stages one, two and three, than at other stages.

One teacher (Ba2) scored highest for Stage 0. However, we can see that the next highest score is for Stage 1. This indicates that the person is aware of the curriculum reforms and is typically interested in getting information and learning more about them.

The other teacher (Ba1) scored high peaks for two stages. While the person has intense concerns about gaining more information (Stage 1) about the outcomesbased curriculum reforms, it may be that the person also has definite ideas about alternatives to the reform curriculum (Stage 6). Table 4 shows the frequency of individual highest stage of concern for the Baklo teachers.

Table 4. Frequency of individual highest stage of concern (Baklo)

Baklo		Highest Stage of Concern								
Stage	0	0 1 2 3 4 5 6								
Individuals	1	1	0	0	0	0	1			

Stages of Concern questionnaire (Drekikier)

Nine teachers at Drekikier Primary School completed the Stages of Concern questionnaire and their individual stage of concern percentile scores are listed in Table 5.

Table 5. Individual stage of concern percentile scores (Drekikier)

Drekikier			Stages	of Concern	Percentile	Scores				
	Awar.	Inform.	Personal	Manag.	Conseq.	Collab.	Refocus.			
SoC	0	1	2	3	4	5	6	Total		
D1	84	60	59	11	24	22	26	33		
D2	60	84	78	85	43	22	47	71		
D3	77	72	67	60	19	25	52	54		
D4	91	66	70	47	24	28	52	60		
D5	83	84	76	65	43	36	69	77		
D6	81	69	80	77	54	64	73	83		
D7	60	48	55	43	7	25	22	21		
D8	77	80	70	30	24	40	52	57		
D9	29	88	70	30	27	12	9	33		
		Group profile N = 9								
Means	71	72	69	50	29	30	45	54		

The mean scores for the Drekikier teachers indicate general group concerns similar to those for Ambunti and Baklo, that is, higher concerns at stages zero, one and two, than at other stages.

Five teachers scored highest for the Stage 0 which indicated that they were highly concerned about their awareness of what the reform curriculum was and how it should be used. For two teachers (D1 and D3), the Stage 0 concerns were higher than Stage 1 concerns indicating that they were aware of the reform curriculum and typically pro-actively interested in gaining more information about it. For three teachers (D4, D6 and D7) Stage 2 personal concerns were higher than Stage 1 informational, indicating that they were more concerned about their well being in relation to the change than they were interested in learning more of a substantive nature about the reform curriculum. This indicates doubt and potential resistance. For these teachers, these concerns have to be reduced before they are willing to engage with the changed curriculum in a more objective manner

Three teachers (D5, D8 and D9) scored highest for the information Stage 1 which indicated that they were aware of the reform curriculum and were concerned to get more information about it and implications for their practices. It would be anticipated that they were pro-active in showing interest in talking to others about the curriculum materials and their use.

One teacher (D2) scored highest at the management Stage 3. This indicated that this teacher was focused on the processes and tasks of using the innovation and the best use of information and resources. It would be anticipated that this teacher's concerns related to issues of programming, organising resources, scheduling and time.

Table 6. Frequency of individual highest stage of concern (Drekikier)

Drekikier		Highest Stage of Concern								
Stage	0	0 1 2 3 4 5 6								
Individuals	6	3	0	1	0	0	0			

Table 6 shows the frequency of individual highest stages of concern for the Drekikier group of respondents. These results would assist change agents in preparing professional development activities relevant to teachers' needs. The result shows that the highest needs are for information about the reform curriculum and how to manage its implementation. The teacher who was at the management stage could be identified as a leader to facilitate learning by other teachers. No teacher was at higher levels of concern which is consistent with the stage of implementation of the new curriculum at the time the data were collected.

Stages of Concern questionnaire (Mersei)

The Stages of Concern questionnaire was completed by four teachers at Mersei Primary School. The percentile scores for the teachers are shown in Table 7.

The mean scores for the Mersei teachers indicate general group concerns similar to those for Ambunti, Baklo and Drekikier, that is, higher concerns at stages one, two and three, than at other stages. The greatest concern is for awareness of what is involved in adopting the new curriculum.

M4

Means

72

60

57

59

Stage of Concern Percentile Scores Inform. Personal Manag. Refocus. Awar. Conseq. Collab. SoC 0 Total 3 M1 72 57 67 47 19 52 69 57 M2 60 57 55 7 38 64 33 6 76 33 M3 37 63 85 13 3 11

60

50

Group profile N = 4

11

31

38

22

39

Table 7. Individual stage of concern percentile scores (Mersei)

59

64

Two teachers (M1 and M4) scored highest for the awareness Stage 0 which usually indicates that they have little involvement with the innovation. Other scores that peaked for M1 were Stage 2 personal concerns and Stage 6 refocusing which could be interpreted as the person being intensely concerned about alternatives for the outcomes-based approach to teaching and learning and personal adequacy to adapt to the demands of the reform curriculum. By contrast the closest high scores to Stage 0 for M4 were at lower levels of concerns about information, self and management. The results are interesting in that they highlight the uniquely individual nature of people's concerns about an innovation that somehow need to be addressed in professional development activities.

One teacher (M3) scored highest at the management Stage 3. This indicates that this teacher was concerned about the process and tasks of using the innovation and making best use of information and resources. It would be anticipated that the concerns related to programming, learning materials for students and the availability of time to understand the new materials. One teacher (M2) scored highest at the collaboration Stage 5. This indicted that this person's focus was on coordination and cooperation with others regarding the use of the reform curriculum materials and the actual implementation. It could be that this person was the champion for the reform curriculum at Mersei school and was intensely concerned about the need for collaboration for successful implementation. In fact during the researcher's visit he seemed to be collaborating very well with his colleagues with regards to the implementation of the reform curriculum.

Table 8 shows the frequency of individual highest stage of concern for the four teachers at Mersei Primary School. Consistent with findings from other schools, teachers have not yet reached the stage of knowing enough about the reform curriculum to be concerned about the impact on students (Stage 4) and the concerns are more focused on self and task.

Table 8. Frequency of individual highest stage of concern (Mersei)

Mersei		Highest Stage of Concern									
Stage	0	0 1 2 3 4 5 6									
Individuals	2	0	0	1	0	1	0				

Stages of Concern questionnaire (Bongu)

The Stages of Concern questionnaire was completed by nine teachers at Bongu Primary School. The individual percentile scores for the teachers are shown in Table 9.

Table 9. Individual stage of concern percentile scores (Bongu)

Bongu			Stages	of Concern	Percentile S	Scores				
	Awar.	Inform.	Personal	Manag.	Conseq.	Collab.	Refocus.			
SoC	0	1	2	3	4	5	6	Total		
Bo1	93	63	55	73	11	36	30	51		
Bo2	53	27	35	9	13	9	6	6		
Bo3	46	37	31	18	5	9	17	6		
Bo4	53	63	57	43	16	22	42	36		
Bo5	53	84	48	43	33	19	57	48		
Bo6	10	57	83	90	30	40	47	63		
Bo7	66	48	39	5	13	31	22	15		
Bo8	60	54	67	39	19	40	26	39		
Bo9	53	51	48	56	21	16	38	33		
		Group profile N = 9								
Means	54	53	51	41	17	24	31	33		

The mean scores for the Bongu teachers indicate general group concerns similar to those for Ambunti, Baklo, Drekikier and Mersei, that is, higher concerns at stages zero, one and three, than at other stages. The greatest concerns are for awareness of what is involved in adopting the new curriculum, having sufficient information and their adequacy to make the changes.

Four teachers (Bo1, Bo2, Bo3 and Bo7) scored highest for the Stage 0 which reflects intense concern about being aware of what the new curriculum is and how it should be used. Interpretation of this result needs to be done in relation to other high scores. Individual differences are apparent as Bo1 scored high for management concerns, Bo2 scored high for personal concerns, and both Bo3 and Bo7 scored high for information concerns.

Two teachers (Bo4 and Bo5) scored highest at the information Stage 1. This can be interpreted as the teachers being interested in gaining information about the reform curriculum, its general characteristics, anticipated effects and requirements for use.

The highest score for the teacher coded Bo8 was at Stage 2. This indicates that the person may be uncertain about the demands of the reform curriculum and their personal adequacy to meet those demands. These concerns need to be eased before the person may be able to engage with the innovation in a more objective manner.

Two teachers (Bo6 and Bo9) scored highest at the management Stage 3. This indicated that they were concerned about the process and tasks of using the

innovation and making best use of information and resources. It would be anticipated that their concerns related to efficiency, organizing, managing, scheduling and time demands for initial use of the materials. No-one was at a higher stage of concern.

Table 10. Frequency of individual highest stage of concern (Bongu)

Bongu		Highest Stages of Concern								
Stage	0	0 1 2 3 4 5 6								
Individuals	4	2	1	2	0	0	0			

Table 10 clearly indicates the frequency of individual highest stage of concern for the nine teachers at Bongu. The greatest need appears to be for awareness of the nature of the reforms, information about the syllabus content and training in how it would affect programming, teaching, learning and assessment activities. Time would also be a concern to adapt to the changes. However, individual differences in concerns need to be considered and a skilled change agent would need to cater for the different concerns of teachers. The two teachers who were at the management stage could be identified as leaders within the school to facilitate learning by other teachers.

Stages of Concern questionnaire (Ranara)

The Stages of Concern questionnaire was completed by nine teachers at Ranara Primary School and the percentile scores from the data analysis are shown in Table 11. The data were analysed using the SoC quick scoring device.

Table 11. Individual stage of concern percentile scores (Ranara)

Ranara			Stages	of Concern	Percentile S	Scores				
SoC	0	1	2	3	4	5	6	Total		
	Awar.	Inform.	Personal	Manag.	Conseq.	Collab.	Refocus.			
R1	60	54	76	56	33	28	17	45		
R2	60	45	52	18	11	10	6	12		
R3	53	37	35	27	5	40	26	12		
R4	53	60	76	47	27	44	34	51		
R5	46	37	25	30	5	12	11	6		
R6	37	54	72	43	19	16	17	30		
R7	86	63	52	18	21	16	38	36		
R8	66	51	59	80	38	48	34	57		
R9	77	80	76	60	38	52	73	77		
		Group profile N = 9								
Means	60	53	58	42	22	30	28	36		

The mean scores for the Ranara teachers indicate general group concerns similar to those for Ambunti, Baklo, Drekikier, Mersei and Bongu, that is, higher concerns at stages zero, one and two, than at other stages. The greatest concerns are for awareness of the nature of the reforms, the requirements of the new curriculum and their personal adequacy to adapt to the changes.

Teachers coded as R1, R4 and R6 had intense personal concerns about the requirements of the reform curriculum and their adequacy to meet the demands. These concerns need to be reduced before they can engage with substantive information about the reforms.

Teachers coded as R2, R3, R5 and R7 had peak scores at Stage 0 indicating concerns about their awareness of what is entailed in the new curriculum. For R2 personal concerns were higher than information concerns but for R3, R5 and R7 it was the reverse. The teacher coded as R9 also had a score reflecting intense concern for information about the outcomes-based curriculum.

Only one Ranara teacher (R8) scored highest at the management Stage 3. It would be anticipated that the teacher's concerns related to efficiency, organizing, managing, scheduling and time demands for initial use of the materials. The profile of this person would also indicate peaks for collaboration and awareness. As this person is at a more advanced stage than other teachers it could be assumed that this person is the champion within the school for the reform curriculum and is concerned with collaboration and coordination with others regarding use of the new materials.

Table 12. Frequency of individual highest stage of concern (Ranara)

Ranara		Highest Stages of Concern								
Stage	0	0 1 2 3 4 5 6								
Individuals	4	1	3	1	0	0	0			

Table 12 clearly indicates the frequency of individual highest stage of concern for the nine teachers at Ranara. Implications for change agents, internal or external to the school, are to ensure that interventions address needs and concerns of teachers.

Stages of Concern questionnaire (Saidor)

The mean scores for the Saidor teachers indicate general group concerns similar to those for Ambunti, Baklo, Drekikier, Mersei, Bongu and Ranara, that is, higher concerns at stages zero, one and two, than at other stages, with personal concerns being the strongest across the group. As these could indicate doubt and resistance it would be important that interventions are aimed at convincing them that there is a need for change and the reform curriculum offers the best way forward.

The Stages of Concern questionnaire was completed by ten teachers at Saidor Primary School and the percentile scores from the data analysis are shown in Table 13.

Table 13. Individual stage of concern percentile scores (Saidor)

Saidor			Stages	of Concern	Percentile	Scores		
SoC	0	1	2	3	4	5	6	Total
	Awar.	Inform.	Personal	Manag.	Conseq.	Collab.	Refocus.	
S1	53	60	57	30	13	28	20	
S2	29	75	55	69	43	25	69	
S3	29	69	55	73	33	36	57	
S4	53	60	59	27	19	19	30	SMT2
S5	66	23	41	34	7	3	6	
S6	37	72	76	47	43	68	60	SFT3
S7	66	72	78	73	21	52	52	
S8	66	75	80	83	43	55	69	SMT1
S9	37	57	76	27	48	59	81	
S10	60	57	48	27	16	36	42	
				Group prof	file N = 10			
Means	50	62	63	49	29	38	49	

At an individual level, the teachers coded as S1, S2 and S4 scored highest for Stage 1 concerns relating to needing information of a substantive nature about the reform curriculum. The teachers coded as S3 and S8 had high Stage 3 concerns relating to the management of time, resources and information for efficient use of the new curriculum materials. The two teachers coded as S5 and S10 scored highest for Stage 0 awareness concerns. S5 had related concerns of a personal nature while S10 had related concerns relating to information. The two teachers coded as S6 and S7 also had intense concerns of a personal nature.

The score for the teacher coded as S9 is interesting as it has a high peak for the refocusing concerns of Stage 6 and a lower peak for the personal concerns of Stage 2. Individuals usually scoring high at stage six have definite ideas about alternative approaches and major changes or replacement of an innovation. Perhaps the interpretation here is that the person is not convinced that there is a need for change and lacks commitment to the outcomes-based approach.

Table 14. Frequency of individual highest stage of concern (Saidor)

Saidor			Highest	Stage of	Highest Stage of Concern								
Stage	0	0 1 2 3 4 5 6											
Individuals	2	3	2	2	0	0	1						

Table 14 clearly indicates the frequency of individual highest stage of concern for the ten respondents from Saidor. Unlike other schools, the results indicate increased development of teachers towards upper stages of concern which is consistent with the fact that the data were collected from Saidor at a later time in the research study than that collected from other schools.

Stages of Concern questionnaire (Tauta)

The questionnaire measuring stages of concern was completed by six teachers at Tauta Primary School and the percentile scores from the data analysis are shown in Table 15.

Table 15. Individual stage of concern percentile score (Tauta)

Tauta	Stages of Concern Percentile Scores										
SoC	0	1	2	3	4	5	6	Total			
	Awar.	Inform.	Personal	Manag.	Conseq.	Collab.	Refocus.				
T1	29	72	83	69	54	68	65	77			
T2	93	51	57	52	19	22	42	45			
T3	53	34	39	27	1	7	9	3			
T4	46	40	45	43	5	22	34	15			
T5	53	72	71	60	30	48	65	66			
T6	53	72	67	15	19	44	42	54			
	Group profile N = 6										
Means	55	57	60	44	21	35	43	43			

The mean scores for the Tauta teachers indicate general group concerns similar to those for all other schools in this research study, that is, higher concerns at stages zero, one and two, than at other stages, with personal concerns being the strongest. The interpretation is that the teachers need to be persuaded that change is necessary and that the reform curriculum is the best way forward. Once this conviction is achieved, the teachers need awareness of the reasons for the reforms and information of a substantive nature about the changes. One of the challenges for a remote school such as Tauta is having access to a skilled change facilitator with an expert level of knowledge about the reforms.

At an individual level, the teachers coded as T2, T3 and T4 scored highest at the awareness Stage 0. The interpretation takes into consideration the relationship to their next highest stage of concern which was Stage 2 personal concerns for all three. The interpretation could be that all three are concerned about their adequacy to meet the demands of the reform and require much more awareness of the nature of the reforms and implication for practice. The teacher coded as T1 also peaked at personal concerns, as explained earlier, and these personal concerns need to be reduced before the person is able to engage with information needed for the implementation process to progress.

Two teachers (T5 and T6) scored highest for the information Stage 1 which indicated that they were aware of the reform curriculum and were probably pro-active in getting more information about it and learning about implications for their practices.

Table 16. Frequency of individual highest stage of concern (Tauta)

Tauta	Highest Stages of Concern								
Stage	0	1	2	3	4	5	6		
Individuals	3	2	1	0	0	0	0		

Table 16 indicates the frequency of individual highest stage of concern for the six respondents from Tauta. The results indicate clearly that the teachers are in need of skilled leadership to gain awareness of the nature of the reform outcomes-based curriculum, information of a substantive nature about its characteristics and the demands it will require of them personally for implementation.

Summary

The responses to this survey showed that most of the teachers were at the lower three stages. These lower three stages are focused on oneself - awareness, information and personal. At the awareness stage they would be asking questions such as, 'What is it?' What is the reform all about? They would especially want to know what an outcomes-based curriculum is. At the information stage they might ask: 'How does an outcomes-based curriculum work? How are the units programmed? How would they go about teaching it?' At the personal stage they might be asking questions such as, 'How does this impact on me? How is the outcomes-based curriculum going to affect me and my teaching career? What is my plan on how to implement it?'

About 15 % of the teachers were at the management stage, which is the middle stage. These teachers might each ask, How can I master the skills & fit it all in?' There was only one teacher who was at the collaboration stage. This person would most likely be saying 'it's working fine but how do others do it?' Two teachers were at the refocusing stage. They might be comparing the previous curriculum with the current one, so they may be asking, 'Is there anything else that's better than the OBE approach?' Whatever their questions and concerns may be, the results clearly indicate the need of professional development. There are calls for regular in-services at the district and school levels, highlighting the need for knowledgeable and skilful change facilitators to make the link between the resource system (or curriculum developers) and the intended users of the materials (Figure 2).

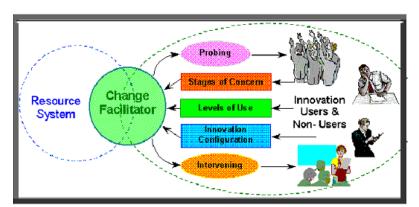


Figure 2: Change facilitator links developers and intended users

To conclude, the survey shows the range where teachers are on the Stages of Concern and the number of teachers at each level. This information allows for planning of appropriate staff development for all the teachers from the two districts and for sub groups or individuals. This could then lead to organizing a number of in-service sessions that are required by the teachers in these two districts. The sessions need to address the various stages of concerns of the teachers so that their specific needs to adequately interpret and implement the reform curriculum are addressed.

References

- Hall, G.E., George, A.A. & Rutherford, W.L. 1979, Measuring Stages of Concern about the Innovation: A Manual for the Use of the SoC Questionnaire, Research and Development Centre for Teacher Education, University of Texas, Austin.
- Hall, G.E., George, A.A. & Rutherford, W.L. 1986, Measuring Stages of Concern about the Innovation: A Manual for Use of the SoC Questionnaire, Research and Development Center for Teacher Education, The University of Texas at Austin.
- Hall, G.E., Wallace, R.D. & Dossett, W.A. 1973, A Developmental Conceptualization of the Adoption Process within Educational Institutions, Research and Development Centre for Teacher Education, University of Texas, Austin.
- Hord, Shirley 1987, Evaluating Educational Innovation, Croom Helm, New York.
- Horsley, D. L. & Loucks-Horsley, S. 1998, CBAM brings order to the tornado of change, *Journal of Staff Development*, 19(4).
- Wright, Wayne E. 2002, *Education Review*, Arizona State University. http://edrev.asu.edu/reviews/rev169.htm

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