

## **The Demand of Change in Teaching and Learning: What are the teachers' reactions?**

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**Abstract:** Educational reform has become a top priority for many countries due to the rapid changes in the globalization era. Hence, various educational transformations related to teaching and learning have been introduced for improving the quality of education. However, the implementation of new policies often strays from the original goals. In the context of education, the challenges of educational reform stem from policymakers not considering the impact of change on all interdependent components of the school ecosystem. One of the most important components of the school ecosystem is the teacher. So, this study aims to explore the reactions of teachers to the changes in teaching and learning that they have gone through. The reactions consist of cognitive, affective, and behavioral elements. This study employed a qualitative approach with semi-structured interviews as the research instrument. The study involved 12 secondary school teachers from the West Coast Zone of Sabah, Malaysia. Data analysis using thematic methods. The results show that there are four dimensions of teachers' reactions, namely Support Change, Dilemma, Indifferent, and Reject Change. The results of this study provide benefits to stakeholders in policy formulation related to teaching and learning in the classroom.

**Keywords:** educational policy, transformation, teaching, and learning, teacher

### **1.0 Introduction**

Educational change is a new branch of educational research with a primary focus on bringing about improvements in education. According to Waks (2007), the emergence of this field of

study in the 1980s was closely related to the influx of educational reform in America when "A Nation at Risk" was launched. Since then, educational change has been emphasized in the world. Hargreaves et al. (2005) state, 'Educational change is ubiquitous. It figures large in Presidential and Prime Ministerial speeches. It is at or near the top of many national policy agendas' (p.vii). This is particularly true in the Malaysian context when various transformations related to teaching and learning have been introduced. For example, in the Interim Strategic Plan of the Ministry of Education Malaysia 2011-2020, five of the 14 educational transformation initiatives involved the teaching and learning matter. Moreover, the launch of Malaysian Education Blueprint 2013-2025 demands intensive transformation and continuous improvement on teacher practice in the classroom. The school must change and develop to be in line with the current need for rapid innovations in internal and external environments (Kursunoglu and Tanriogen, 2009). Concerning this, teachers are considered as the front-line implementers in the change of teaching and learning process in the classroom. As Tai et al. (2014) note that teachers are the real source of, and the vehicle for, school change because they are the closest to the students and are more aware of the needs of the students in the learning process. In fact, in the change process, numerous studies have revealed that the teacher is one of the most important factors (Fullan, 2007; Hall and Hord, 2015).

In the process of implementing change, teachers face various challenges (Behar-Horenstein and Berlin, 1995; Levin, 2001). Specifically, in the context of the centralized education system, teachers are considered passive i.e. only as implementers to the decisions made by the policymakers. On the other hand, employees are not passive recipients of change (Kernan and Hanges, 2002). In the educational context, the tendency for teachers to make different interpretations and respond according to their understanding of a new policy often occurs (Darling-Hammond, 1990; Rousseau & Tijoriwala, 1999). Micheal Fullan (2001), a pioneer in the field of educational change studies states that many educational innovations introduced failed to achieve their goals due to a mismatch between intended change and actual change when there is a separation between policymakers and policy implementers. According to Bovey and Hede (2001b), management usually focuses on technical elements of change with a tendency to neglect the equally important human element which is often crucial to the successful implementation of change (p.372). Moreover, the demands of change cause individuals to experience reactions such as resistance (Anghelachea and BenGeaa, 2012). Individuals experience changes in many ways as well as differ their willingness to adapt to change (Darling-Hammond, 1993). Thus, too often change creates the dilemma of whether there is acceptance to change. Concerning this, the study of teachers' reaction to the demand for change in their daily practice is crucial. Literature indicates that there are three dimensions of possible reactions toward change namely cognitive reaction, affective reaction, and behavioral reaction (Piderit, 2000; Bouckennooghe, Devos and Van Den Broeck, 2009; Ajzen, 2012; Vakola and Nikolaou, 2005). These reactions can range from negative as the sign of rejection to positive as the sign of support. Thus, the teachers' reaction has a crucial impact on the success or failure of change implementation in the school. As the implementers at the front-line, understanding teachers' reaction to change will provide information to the policymakers on how to best deal with many challenges related to the human element in the implementation of new education policy in school. The

heart of managing change is understanding the people at the grassroots level of implementation (Fullan and Stiegelbauer, 1993). Over the decades, studies on educational change have paid more focus to the challenges related to technical barriers compare to human barriers. This is particularly true in the Malaysian context whereby lack of exploration of how teachers react to the demand for change in the classroom.

## **2.0 Reaction toward change**

The teachers' cognitive, affective and behavioral reactions toward change have a significant impact on the success or failure in the implementation of change. In general, Piderit (2000) shows that 'resistance to change' is represented by the negative responses along the three dimensions. Conversely, 'support for change' is represented by the set of responses that are positive along all three dimensions (p.783). It is assumed that intentional, cognitive, and affective reactions toward change come into play at different stages in the change process, and do not necessarily coincide (Bouckenooghe, Devos and Van Den Broeck, 2009, p.561).

Cognitive reactions to change are connected closely to the teachers' belief about the significance of the change, and how the change would benefit them personally as well as the school (Tai, 2013). During the organizational change, when adequate information is absent (Coglan, 1993) individuals create their own interpretation of what is going to happen, how they are perceived, and what others are thinking or intending (Bovey and Hede, 2001a). Tai et al. (2014) outline five components of teacher change belief namely discrepancy, appropriateness, efficacy, principal support, and valence. Firstly, the discrepancy refers to teacher beliefs on the benefit of change compare to current practices (Tai, 2013). The discrepancy can be connected to relative advantage which is the extent to which the implementer believes the innovation is better than the previous one, for example reducing discomfort, saving time, raising the status of the profession and the results are easily visible (Rogers, 2003). Secondly, the appropriateness focuses on the extent to which the proposed change addresses the needs of the school (Tai, 2013). As noted by Kernan and Hanges (2002), if the employees perceive that the top management is not to be trusted, then the employees are unlikely to believe that the proposed initiative is relevant. Thirdly, efficacy is related to the preparedness to cope and make the change succeed (Tai, 2013). Teachers as implementers need to have sufficient knowledge and skills so that they are literate with the needs of such innovations (Ely, 1990). According to Ellsworth (2000), the factor of lack of training among teachers often occurs and is seen as insignificant when it is only a last-minute add-on to the implementation plan (p.69). Many past studies have shown that teacher preparation has been a constraint to the successful implementation of teaching and learning reform in schools. Fourthly, the principal support focuses on the belief of the school leader's support for implementing change (Tai, 2013). The strong support from the school leaders provides a positive school environment for change and this will strengthen the teachers' positive judgment on the intended change (Berneth et al., 2007). Lastly, the valence is a belief that the change is beneficial to teachers and can be enjoyed over a period of time (Tai, 2013).

Affective reactions to change are defined as teachers' feelings toward change such as the feeling of anxiety and satisfaction about the change (Tai, 2013). The teacher feeling

toward the demand for change may range from negative emotions such as fear, anxiety, anger, disappointment and resentment to positive emotions e.g. happiness, enthusiasm, and excitement (Tai et al., 2014). According to Fischer and Manstead (2008) generally, there is ample evidence showing that employees experience a huge diversity of emotions as part of their jobs. Research on stress, job satisfaction, emotional dissonance, or other social interactions at work provides ample show an abundance of work-related emotions at the individual level. In the context of implementing change, the feature of change such as too complex will put pressure on implementers (Rogers, 2003). Vakola and Nikolaou (2005) note that the changes that are considered complex or difficult to understand will be slower or rejected directly by implementers when causing confusion and stress. Similarly, the observability of change i.e. the extent to which the innovation can be seen in its implementation by other teachers, then reduces complexity and facilitates observation to help teachers learn the change. As a result, this will help the teacher to keep away the feeling of burdensome for implementing change. Zaltman and Duncan (1977) who pioneered the study of 'The Resistance to Change' identified the cultural element of ethnocentrism involves ego feelings or situations where implementers feel they are smarter than innovators. Next, Zaltman and Duncan also stress the term 'saving face' which is a situation that overemphasizes the disadvantages of old practices versus the benefits of new practices. This situation seems to point to the teacher's mistakes and this can cause discomfort and low self-esteem.

Behavioral reactions to change refer to the extent to which teachers have the intention to support or reject the change (Tai, 2013). According to Kennedy and Kennedy (1996) 'People form intentions to do something--these intentions comprise indications of how hard someone is willing to try to do something and what effort they are willing to put into the behavior. At an appropriate time and situation, these behavioral intentions are translated into action' (p.354). Behavioral reactions can be elaborated between two opposite intentions whether positive (supporting change) or negative (rejecting change).

All the three dimensions of reactions (cognitive, affective, behavioral) are well-acknowledged in the literature as the critical success or failure factors of organizational change (Bouckennooghe, Devos and Van Den Broeck, 2009; Laszlo and Laszlo, 1997). To gain positive reactions from teachers, it is important to consider all interdependent dimensions in the school ecosystem. This is in line with the concept of systemic change which emphasizes the interdependence of various contextual aspects or parts of an organization (Weber, 1979). Laszlo and Laszlo (1997) refer to these parts as sub-systems that need each other for an organization to achieve goals. Change in one aspect requires a change in another aspect due to the interrelated nature of the sub-systems in an organization (Badwin, 2010, p.41). Sashkin and Egermeier (1992) have identified three interdependent aspects in the implementation of educational change, namely the features of change, the culture of schools and the human factor. The features of changes (Rogers, 2003), as well as the culture of the school, tend to influence the belief, feelings and behavior of teachers as the human factor in the change initiative. According to Sokal, Trudel and Babb (2020) one teacher cognitively supports the new behavior and accepts it emotionally, it is more likely that they will intend to enact the behavior. However, according to Hall and Hord (1987), the policymakers from the top often overlook the interdependent dimensions in the school

ecosystem. This situation creates the reactions which show the implementers' readiness in cognitive, affective and behavioral intention for accepting or rejecting change as a result of their experience during the process of implementing change (Bouckennooghe, Devos and Van Den Broeck, 2009).

### 3.0 Methods

The study uses a case study approach for exploring the teachers' reactions to the demand for change in teaching and learning practices. The case study allows for a deeper investigation of the phenomenon within a real-world context. The study is located on the west coast of Sabah. A total of 12 participants were selected based on purposive sampling (maximum variation). Six of the participants are teachers from the urban schools in Kota Kinabalu. The other six teachers were selected from rural schools in Sipitang, Kota Belud, and Ranau. Two teachers were selected from each of the selected areas. The selected participants have three different ranges of teaching experiences: less than 10 years (novice teacher), 11-25 years (experienced teacher, and more than 25 years (Senior teacher). The reason for varying the location and teacher teaching experience is that the researcher wants to gain a wider perspective of reactions toward change which is the main focus of this research. Table 1 shows the background of the participating teachers.

**Table1.** Background of the participating teachers

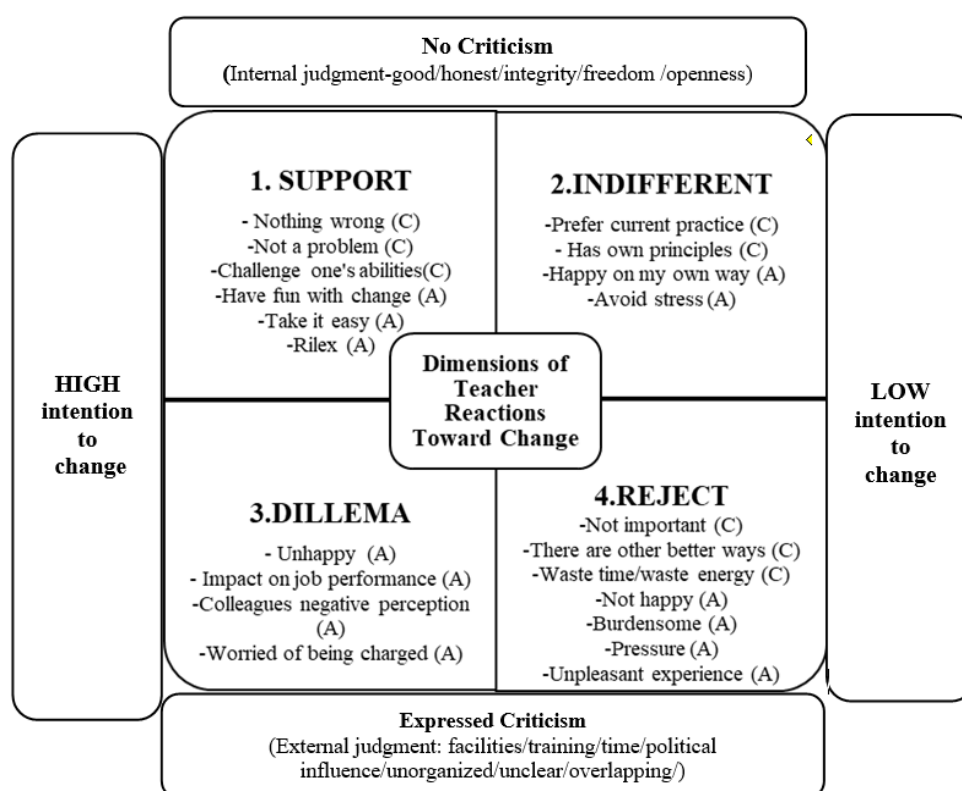
No	Name (Pseudonyms)	Age	Teaching experience (years)	Areas
1	Liza	30	3	Rural school
2	Ali	33	5	Rural school
3	Rozi	39	12	Rural school
4	Zety	42	15	Rural school
5	Ahmad	48	21	Rural school
6	Halim	53	26	Rural school
7	Dina	31	4	Urban school
8	John	30	3	Urban school
9	Noni	38	11	Urban school
10	Aziz	40	13	Urban school
11	Mona	52	25	Urban school
12	Fred	55	28	Urban school

The research instrument used for collecting data was semi-structured interviews. An interview protocol was constructed as a guide so that the interviewer could generate data appropriate to the needs of the study. Part one of the interview focused on the cognitive reaction of the teacher. Part two of the interview concentrated on the affective reaction. Finally, part three examined the intention to change. This study followed the guideline for case study research established by Merriam (1998) and Yin (1994) by using a multi-member

research team to enhance the internal validity. Four researchers carried out the case studies. Two researchers were assigned for each case study to prevent bias. As a way to protect the participants, they were required to sign informed consents in which a clear description of the interaction between the researcher and the participants was provided and an indication that their names or identities would not be disclosed. Data were analyzed through Thematic Analysis (TA). TA is a method for systematically identifying, organizing, and offering insight into, patterns of meaning (themes) across a dataset (Braun and Clarke, 2012). The data analysis involved seven main steps: Step 1: Transcribing the audio data from interviews; Step 2: Familiarising with data entails repeated and active reading through the data; Step 3: Generating initial code; Step 4: Searching for themes; Step 5: Reviewing themes; Step 6: Defining and naming themes, and Step 7: Producing the report.

## 4.0 Results

This study aims to identify teachers' reactions to changes in schools from time to time. The results show four quadrants of teachers' behavioral reaction dimensions, namely support, indifference, dilemmas, and reject as shown in Figure 1.



**Figure 1.** Dimensions of reactions

### 4.1 Internal judgment vs intention to change

Internal judgment is related to core values that influenced action or behavior. The results of this study showed some core values such as honesty, integrity, freedom, and openness

influenced the teachers' intention to change or not to change. This study revealed that the teachers in both support change and indifferent dimensions are forced by internal judgment. However, despite that similarity, they are opposite in terms of intention to change. Teachers in the support change dimension show a high intention to change or accept change. In contrast, the teacher in the indifferent dimension shows a low intention to change or resistance to change. Furthermore, both of the dimensions are characterized by certain cognitive and affective reactions.

#### **4.1.1 Dimension1- Support Change**

There are three teachers in this dimension namely Liza, John, and Dina. They are new teachers with less than five years of teaching experience. Two of them are teachers from an urban school (Dina, John) and one from a rural school (Liza).

Support change is characterized by the teacher who believed and felt the demand of change has an internal value for them and showed a high intention to change. Liza, for example, expressed her opinion on the need to move to 21st-century learning in the student learning environment,

Just follow...nothing wrong with change ...every proposed change heading toward good results... take it easy, ...not exhaustively, I try to follow (Liza)

This conversation indicates Liza has the mindset that change is 'good'. This is the indicator of value she held for change demanded on the teacher. The value strengthens her belief that framing education based on 21<sup>st</sup>-century learning is the right direction. The phrases 'just follow', 'I try to follow' showed the high intention to change.' Referring to the ICT in teaching and learning, John said,

...from chalk and talk, then we are advised to use ICT... yes, equipment quite limited, share one laboratory for all, but that's, the important thing is the interest to use, can adjust ...do it honestly and that will make you happy (John)

John held the value of 'honest' and believed that one will be rewarded with happiness. His high intention for change can be inferred when he said 'interest to use'. For Dina, she felt that implementing the intended change is the teacher's responsibility and labeled those who are refused as 'low of integrity'. She suggested,

...take the opportunity to learn new things, when you get used to it, then everything will be easy... I consider change as part of the learning process (Dina)

Both the value of integrity and the suggestion by Dina showed that she has a high intention to change.

#### **4.1.2 Dimension 2-Indifferent**

Only one teacher (Ahmad) is in this category. Ahmad is a senior teacher who has been teaching for 21 years. Ahmad teaches in a rural school. Indifferent is characterized by the teacher who maintains their existing internal value of what he believed and felt about his existing practice and indicated a low intention to change. He did not raise any criticism or dissatisfaction toward change. He held the mindset of 'openness when he said 'I'm not

against change, nor disagree. He also values 'freedom' when stressed that 'I have the right to decide'. He elaborated,

I have my own principles, whatever change, our routine still the same, delivering knowledge, giving instruction... convey what needs to be conveyed, there is a syllabus that needs to be completed... drill and practice, repetitious exercise, ... so far, I satisfied enough... I'm happy with my way (Ahmad)

According to Ahmad, as a senior teacher, he has gone through various situations and challenges. Based on that experience, he always reflects and improves himself according to his preferences and ability.

## **4.2 External judgment vs intention to change**

Teacher responses with the expression of criticism can be related to their judgment toward the external factors that highlighted the barriers in the change process such as lack of facilities, insufficient training, time constraint, and political matter. However, despite the dissatisfaction regarding barriers, teachers in the dilemma dimension show a high intention to change. Conversely, teachers in the reject dimension indicate a low intention to change. Furthermore, the teachers in the reject dimension are characterized by both cognitive and affective reactions. However, the dilemma dimension is mainly associated with the affective reaction only.

### **4.2.1 Dimension 3: Dilemma**

There are four teachers in this dimension, namely Noni, Aziz, Ali, and Rozi. Three of them are experienced teachers who have taught between 11 to 14 years (Noni, Aziz, Rozi). Only Ali is in the novice category and has been teaching for 5 years. Noni and Aziz are from urban schools, while Ahmad and Ali are from rural schools.

Despite being dissatisfied with the barriers in the change process, the teachers in this dimension indicated a high intention to change. This study found that they were forced by 'subjective norms'. According to Kennedy and Kennedy (1996), 'These norms reflect not the individual's personal beliefs but what the individual believes others think about the behavior concerned (p.355). Others may be individuals who influence teachers such as colleagues, principals, students, and ministry officials. Referring to the demands of integrating High-Level Thinking (HOT) across the curriculum, Noni expressed her dissatisfaction with time constraints to cover the syllabus. She explained

...HOT in teaching takes a lot of time... a lot of activities... student center, you know... yet the syllabus coverage remains the same... and needs to be completed before the examination week.

However, despite being unhappy with that situation, she felt that 'you like it or not, you have to take action... I don't like to be judged as underperformed.' Similarly, Aziz also faced a similar situation when he talked about the implementation of Classroom Assessment. He explained,

Many challenges, apart from time for marking, students also create problems when they submit assignments late, some do not submit assignments... many questions related to the reliability... some students may copy from others, we don't know?... difficult to monitor.



However, according to Aziz, despite the pressure situation, 'the students' marks should be there...if you failed to ready the marks by the due date, you will be in trouble then'. Therefore, according to Ahmad, in that situation 'no choice... you have to force yourself.' Ali is also in the 'dilemma' category. He always has a sense of 'lazy to think all about the new demands' due to some constraints such as lack of facilities. However, at the same time, he is 'worried about being left behind.' According to Ali,

No one wants to be labeled as a troubled teacher... facing change of course stress, but to some extent better not to ignore it. (Ali)

Rozi questioned the readiness of teachers before implementing any changes. Recalled the implementation of the Teaching and Learning of Science and Mathematics in English (PPSMI), she said,

PPSMI... must be in English, I am not very fluent in English... so what I did was teach in Malay, highlight important terms in English...pressure of course, but I already tried my best to implement it.

#### **4.2.2 Dimension 4: Reject Change**

There are four teachers in this category (Zety, Halim, Mona, Fred). Three of them are senior teachers who have been teaching for over 20 years (Halim, Mona, Fred). Zety and Halim come from the rural area and, Mona and Fred come from the urban area. Teachers in this dimension are dissatisfied with some situations and show a low intention to change. Fred for example questioned the preparedness of teachers. He argued,

Lack of preparation is a major problem ... like me, when it comes to ICT, for me it is difficult, for young teachers they can catch up easily, but old teachers, it is quite difficult, pressure...exposure courses are required, an hour or two briefings is not enough, need a practical course too ... it takes time, so it's not worth for a teacher who is about to retire like me, so let the young teachers do it. (Fred)

Mona questioned the changes that create new problems for teachers. So, Mona felt there was another more appropriate way. She explained

HOT for example... too me burdensome... I think HOT is better through special programs ... stand-alone, so at the same time, objectives are more focused, we can directly measure the effect of HOT improvement after a series of the program (Mona)

For Halim, as a senior teacher with 26 years of experience in teaching, he felt unhappy when talking about change because,

implementation often less organized, unclear, overlapping, when there is a problem in the middle of the road, terminate ... waste of time, waste of energy, waste of money... also a lot of political influence...so I concluded all these are cosmetic and not important (Halim)

Zety argued the problems related to the lack of environmental support especially basic facilities in the rural school.

We are talking about 21st-century learning... do you know the problem in remote areas, basic facilities are not enough, basic facilities are not available ... electricity also depends on solar, internet is unstable, some areas no connection at all...are you happy then? this all needs to be given attention first, what is the solution then? When? (Zety)

### 4.3 Reactions and the background of the teachers

This study revealed three patterns regarding the teaching experience and the reaction dimensions: (i) Three of the four teachers with teaching experiences below five years (novice teachers) were supporting change; (ii) Three of the four teachers with teaching experience ranging from 26 years to 28 years (senior teachers) were rejecting change; (iii) Three of the four teachers with teaching experiences range from 11 years to 13 years were under the dilemma dimension. This indicates that the novice teachers were more open to change efforts compare to the senior teachers. Furthermore, the results show that there is no clear pattern regarding the area of schools and the reaction dimensions.

**Table 2.** Reaction and background of the teachers

No	Name	Teaching experience (years)	Areas	Dimension
1	Liza	3	Rural	Support
2	Dina	4	Urban	Support
3	John	3	Urban	Support
4	Ahmad	21	Rural	Indifferent
5	Rozi	12	Rural	Dilemma
6	Ali	5	Rural	Dilemma
7	Noni	11	Urban	Dilemma
8	Aziz	13	Urban	Dilemma
9	Mona	26	Urban	Reject
10	Fred	28	Urban	Reject
11	Zety	15	Rural	Reject
12	Halim	26	Rural	Reject

### 5.0 Discussion

The finding of this study provides evidence that teachers have different reactions in responding to change efforts. This study investigated three types of reactions toward change namely cognitive reaction, affective reaction, and behavioral reactions. This study indicated that there are four dimensions of teachers' behavioral reactions, namely support change, dilemma, indifference, and reject change. The support change and dilemma dimensions tend to accept change. In contrast, both indifferent and reject change are associated with resistance to change.

This study found that the dimensions in the behavioral reactions have some connection with the cognitive reactions. The cognitive reaction refers to an individual's belief or thinking about change (Piderit, 2000). Bryan and Atwater (2002) further proposed

that “beliefs are part of a group of constructs that describe the structure and content of a person’s thinking that are presumed to drive his/her actions” (p. 823). This study showed that teachers have different cognitive reactions toward change. Those who support change were more inclined into positively thinking by assuming the change as ‘not a problem’. They also believed that change will ‘challenge one’s ability.’ According to Thomas (2003) the positive thinking toward change effort constituted an important indicator in adopting change efforts in schools. In contrast, teachers who reject change expressed more negative thinking toward change efforts. For example, they believed that change efforts as something that wasting time. Furthermore, some of them also disagreed with the recommended strategies for implementing change. Korsgaard et al. (1995) call this situation as ‘procedural conflict’ when the recommended strategies to achieve goals are different and in conflict with the way employees want to achieve the same goal. As a result, they showed a low intention to change. Similarly, the indifferent dimension also tends to show a low intention to change due to the unwillingness to depart from the existing principles and practices. Bovey and Hede (2001b) attributed this way of thinking to make them passive and uncommitted to any change effort.

This study also found that the dimensions in the behavioral reactions have some connection to the affective reactions. Affective reactions are usually connected to emotions and feelings (Tai, 2013). For example, teachers who support change showed more positive feelings such as ‘relax’, ‘take it easy’, and ‘have fun’. In contrast, teachers who reject change showed more negative emotions such as unhappiness, feeling burdened, and depression. These negative emotions arise when faced with change because they need to leave the habit and need to learn something new (Piderit, 2000). As a result, they tend to show a low intention to change. However, in the dilemma dimension, despite having negative feelings such as being unhappy, they tend to show a high intention to change. This is due to ‘subjective norms’ such as worried about negative perceptions of colleagues, the impact on job performance, and the possibility of being fined. The subjective norms reflect not the individual’s personal beliefs but what the individual believes others think about the behavior concerned (Kennedy and Kennedy (1996; p.355).

This study also revealed that novice teachers are more open toward accepting change compared to senior teachers. Anghelachea and Benteaa (2012) explained that old age feels more comfortable in a position to continue in a known direction, than in a position to experience the new. In addition, this study found that there is no clear pattern regarding the area of schools and the reaction dimensions. The result of this study concurs with Anghelachea and Benteaa (2012) who found that there are no differences between the teachers in the urban environment and the teachers in the rural environment in point of the attitude towards change.

In conclusion, this study indicates that the change efforts in school are not an easy task. Teachers as one of the components in the school ecosystem in particular and the education system, in general, have various beliefs and feelings which may influence their intention to accept or reject change efforts. In a centralized education system, the non-involvement of the implementing group during decision-making gives space for policymakers to refer to ideal theories and easily overlook reality (Schon, 2010). This situation forces the

implementing group to be less supportive of the changes demanded when they expressed dissatisfaction. As shown in this study the teachers who are dissatisfied with some barriers tend to reject change. The barriers include the lack of facilities, training, time constraints, political influence, unorganized and unclear goals. The findings of this study provide evidence for the need to consider both the human and technical elements in change management. For the human factor, strategies should be taken to shape the teachers' positive thinking, belief, and feeling as well as behavior towards change. For the technical factor, the teachers as the grass-root at the implementation level should be involved in the decision-making process as they better understand the reality in the school in general and the classroom in particular (Spillane, 2002).

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### References

1. Ajzen I. (2012). The theory of planned behavior. In P. A. M. Lange, A. W. Kruglanski & E. T. Higgins (Eds.), *Handbook of theories of social psychology*, Vol. 1: 438-459. London, UK: Sage.
2. Anghelachea, V & Benteaa, C.C. (2012). Educational changes and teachers' attitude towards change. *Procedia- Social and Behavioral Sciences*, 33 (2012): 593 – 597.
3. Behar-Horenstein, L. S., & Berlin, B. B. (1995). Strategies for school change. In J. Zadjia, (ed.). *Education and Society*. Australia: James Nicholas Publishers Pty Ltd: 309-319.
4. Bovey, W. H., & Hede, A. (2001a). Resistance to organisational change: the role of defence mechanisms. *Journal of Managerial Psychology*, 16(7): 534–548.
5. Bovey, W.H., & Hede, A. (2001b), "Resistance to organizational change: the role of cognitive and affective processes". *Leadership & Organization Development Journal*, Vol. 22 Iss 8: 372 – 382.
6. Bouckenooghe, D., Devos, G., & van den Broeck, H. (2009). Organizational Change Questionnaire—Climate of Change, Processes, and Readiness: Development of a new instrument. *The Journal of Psychology: Interdisciplinary and Applied*, 143(6): 559–599.
7. Braun, V. & Clarke, V. (2012) Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds), *APA handbook of research methods in psychology*, Vol. 2: Research designs: Quantitative, qualitative, neuropsychological, and biological: 57-71, Washington, DC: American Psychological Association.
8. Bryan, L., & Atwater, M. (2002). Teacher beliefs and cultural models: A challenge for science teacher education programs. *Science Education*, 86: 821-839.
9. Ely, D. (1990). Conditions that facilitate the implementation of educational technology innovation. *Journal of Research on Computing in Education*, 23(2): 298-305.
10. Ellsworth, J.B. (2000). *Surviving Change: A Survey of Educational Change Models*. Syracuse NY: ERIC Clearinghouse on Information and Technology. ED443417

11. Fischer, A. H., & Manstead, A. S. R. (2008). Functions of Emotion from an Organizational Perspective. N. Ashkanasy & G. Cooper (Eds.), *Research Companion to Emotion in Organizations*. London & Boston: Edward Elgar: 2-17.
12. Fullan, M. (2001). *The New Meaning of Educational Change*, (3<sup>rd</sup> edn), New York: Teachers College Press.
13. Fullan, M. (2007). *The NEW meaning of educational change*. New York, NY, Teachers College Press.
14. Fullan, M. & S. Stiegelbauer. (1991). *The New Meaning of Educational Change*. London: Cassell Educational Limited, 2nd edition.
15. Hall, G.E. & Hord, S.M. (1987). *Change in School: Facilitating the Process*. Albany: State University of New York Press.
16. Hall, G.E & Hord, S.M. (2015). *Implementing Change: Patterns, Principles, and Potholes*.(4<sup>th</sup> edn). Pearson.
17. Hargreaves, A. (2005). Pushing the Boundaries of Educational Change. In A. Hargreaves et al (Eds), *Extending Educational Change: International Handbook of Educational Change*.
18. Kementerian Pelajaran Malaysia (2012). *Pelan Strategik Interim Kementerian Pelajaran Malaysia 2011-2020*. Kementerian Pelajaran Malaysia.
19. Kennedy, C. and J. Kennedy (1996) Teacher attitudes and change implementation. *System* 24(3): 104-111.
20. Kernan, M. C., & Hanges, P. J. (2002). Survivor reactions to reorganization: Antecedents and consequences of procedural, interpersonal, and informational justice. *Journal of Applied Psychology*, 87(5): 916–928.
21. Korsgaard, M.A., Schweiger, D. and Sapienza, H. (1995) Building commitment, attachment and trust in strategic decision-making teams: the role of procedural justice. *Academy of Management Journal*, 38(1), pp. 60-84
22. Kursunoglu.A & Tanriogen.A. (2009). The relationship between teachers' perceptions towards instructional leadership behaviors of their principal and teachers' attitudes towards change. *Procedia Social and Behavioral Sciences*. Vol 1: 252-258.
23. Levin, H.M. (2001). Educating for Commonwealth. *Educational Researcher*, 30 (6): 30-33.
24. Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education*. Jossey-Bass Publishers, San Francisco.
25. Laszlo, E. and Laszlo, A. (1997). The Contribution of the Systems Sciences to the Humanities. *Systems Research and Behavioural Science*, 14: 5–19.
26. Piderit, S.K. (2000). Rethinking Resistance and Recognizing Ambivalence: A Multidimensional View of Attitudes Toward an Organizational Change. *The Academy of Management Review*, 25(4):783-794.
27. Rogers, M. E. (2003). *Diffusion of Innovation* (5<sup>th</sup> edn). London: Free Press
28. Sashkin, M., & Egermier, J. (1992). School Change Model and Processes: A Review of Research and Practice. Paper presented at annual meeting of the Merican Educational Research Association, San Francisco.
29. Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. NY: Basic Books.

30. Schon, D. A. (2010). Government as a Learning System. Chapter 1 in Blackmore, C. (ed.) *Social Learning Systems and Communities of Practice*. Springer, Dordrecht.
31. Spillane J.P. et al (2002) 'Policy Implementation and Cognition: Reframing and Refocusing Implementation Research'. *Review of Educational Research*. Vol 72 No 3: 387-431.
32. Sokal, L., Trudel, L.E. & Babb, J. (2020). Canadian teachers' attitudes toward change, efficacy, and burnout during the COVID-19 pandemic. *International Journal of Educational Research Open*, V1, 2020.
33. Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology*, 84: 514–528.
34. Tai, M. K. (2013). Modelling of principal change leadership competencies and its relationship with teacher change beliefs and teacher attitudes toward change. Doctoral dissertation, Sultan Idris Education University, Malaysia.
35. Tai, M.K., Omar Abdull Kareem, Mohamad Sahari Nordin & Khuan, W.B. (2015). Teacher change beliefs: Validating a scale with structural equation modelling. *School Leadership and Management*, 35(3): 266-299.
36. Tai Mei Kin, Omar Abdull Kareem, Mohamad Sahari Nordin & Khuan Wai Bing (2014): Teacher change beliefs: validating a scale with structural equation modelling, *School Leadership & Management: Formerly School Organisation*. *School Leadership & Management*, 2014 <http://dx.doi.org/10.1080/13632434.2014.962503>.
37. Thomas, B. (2003) 'Innovation support networks and SMEs in industrial South Wales'. *International Journal of Applied Management Studies*, Vol. 1, No. 2: 15–27.
38. Vakola, M., & Nikolaou, I. (2005). Attitudes towards organizational change: What is the role of employees' stress and commitment? *Employee Relations*, 27: 160-174.
39. Waks, L.J. (2007). The Concept of Fundamental Educational Change. *Educational Theory*, 57 (3).
40. Weber W. (1979). *An Introduction to His Life and Work*, translated by Philippa Hurd, Polity Press: 174-96.
41. Yin, R. K., (1994). *Case Study Research Design and Methods: Applied Social Research and Methods Series* (2<sup>nd</sup> edn). Thousand Oaks, CA: Sage Publications Inc.
42. Yogesh Hole et al 2019 *J. Phys.: Conf. Ser.* 1362 012121
43. Zaltman, G. & Duncan (1977). *Innovation and Organisation*. New York: John Wiley.