Abstract- In order to accomplish, the objectives of the study and applies a variety of methods in the context of the existing research. I have perceived that qualitative research is the appropriate approach, as it enables me (as a researcher) to obtain a deeper understanding of the topic and thereby offers me a chance to explore the matters from the viewpoints of teachers and students; to discuss their interpretations and reflect on Problem Based Learning (PBL) in teaching and learning; as Flick (2009) argued that enhancing perceptions and the academics’ reflects on their studies as part of the procedure of data construction. In the same light of the thoughts of Siegel (2002:1), confirms that the data in qualitative research does not approach by specific questions to answer or hypotheses to test but through “understanding behaviour from the subject’s own frame of reference”.

For achieving my main goal of developing students’ higher thinking skills and abilities to face problems in primary school in Bahrain, I found Action Research (AR) is a suitable strategy for achieving my aim. The purpose of using AR in my research, was to generate new knowledge which can support into a new theory, develop learning and improve practice. Therefore, the research is furnished towards enhancing the processes of learning and teaching in Kingdom of Bahrain. Throughout the investigation, the researcher will use a multiple of research methodology to gather the data. In addition, the studies will be conducted in two stages to integrate theory and practice: The first stage, aims to investigate the teaching methods of IE in primary schools, in KB to identify the teaching method employed by the teachers and how it relates to the subject at hand. This section, demonstrate the current teaching methods in IE in KB, in order to discover the varieties of pedagogy by which Bahraini students are taught, this stage investigates the context: what’s currently happening in classrooms? Data collected through face-to-face interviews with three sector Quality Assurance (QA), specialist supervisors in IE, and Islamic teacher in state schools. The second stage, the therapeutic stage, examines the impact of PBL on students taught via the ‘Learning Pack’ - which was designed based on the PBL approach. This stage, is managed by a multi-methods approach including: teachers’ diaries, co-teaching, observation, weekly discussion with team teaching, initial focus group discussion, second focus group discussion plus face-to-face interviews with team teachers and students. In addition, a positivist measure will be used to augment the results through pre-tests and post-tests both of which provide additional measurements for the purpose of using numerical results, to help provide me with a complete view of the data and to support my understanding. The multiplicity of approaches assists me to easily organise and analyse unstructured information. The investigation will take place in primary schools to boost students’ and teachers’ performance, in order to provide solutions to classroom issues. Hence, the research bases on qualitative approach and the test assess the students’ higher thinking skills uses and the process of PBL.

Index Terms- Action Research, Islamic Education, Primary school

I. INTRODUCTION

Action research (AR) is a suitable strategy for achieving the research objectives. As Richards and Farrell (2005:171), has mentioned that the word action research refers to “a systematic approach to carrying out investigations and collect information that is designed to illuminate an issue or problem and to improve classroom practice”. Nixon (1981:92) indicates that AR is “qualitative rather than quantitative measurement” due to the fact that all qualitative research is similar; the researcher is responsible for generating interpretations and making decisions. Nonetheless, Creswell (2012) evaluated action research by arguing that both quantitative and qualitative data should be collected to better analyse the problem.

Additionally, there various of advantages that AR comprehend: one of which Richards and Farrell (2005) and Creswell (2012) has mentioned it enables teachers to develop a deeper understanding of many issues in teaching and learning, as well as it acquires useful classroom investigation skill, which stage one will be focusing on. Another advantage, critique which Carr and Kemmis (1983)(cited in Somekh, 2006) stated that it is impossible to reflect on self-critique, while discovering the notion of this observation which is based on a critique, that prerequisites between the teachers, students and researchers, as the concept of reflexive critique targets to develop the ability of individuals to rationally appraise a given situation (Elliot, 1991; O’Brien, 1998). A further advantage of the AR cyclical process combines practice and research theory, as Smoekh (2005) indicate that the existing division between research and practice, could be overcome by AR. Also, the objective of educational action research, as observed by Servan et all (2009), is to enhance all aspects related to the educational process, including conditions contexts and outcomes. AR will help me explore the professional competence of the teaching team through subjective experience, as Richards and Farrell (2005) and Creswell (2012) emphasised that AR provide teachers with efficient skills through teachers reflecting on their own profession. Forbye, AR will serve as a new methodological
approach in KB. Ram Punia (2004), confirms that action research is not applied on a regular basis in developing nations. Organisations such as the United Nations have started to promote the production and use of local practical knowledge, which can be achieved based on action research methodology.

II. THE STAGES PROCEDURE

The stages created accordingly to the object of the action-reflection cycle, that been designed by Whitehead and Mcniff (2012) presents two stages. Under stage one, there are two methods of observation and reflection. And under stage two, there are three stages Act, Evaluate and Modify. Those staged were organise according to the following of the study- see figure (1)

![Figure 1: action –research cycle](image)

As Richards and Farrell commented: “Data collected before the action research enables one to examine the issue or problem in depth in order to arrive at a way of addressing the problem. Data collected after the intervention will enable the teacher to decide if the action taken solved the problem” (2005: 180). Consequently, the first stage contemplates the current teaching methods in IE in KB in order to discover the varieties of pedagogy by which Bahraini students are taught. This stage investigates the context: what’s currently happening in classrooms? Data is collected through face-to-face interviews with three sector Quality Assurance (QA), specialist supervisors in IE and Islamic teacher in state schools. The second stage, the therapeutic stage, investigates and evaluates the impact of PBL on students taught via the ‘Learning Pack’, which was designed based on the PBL approach. This stage is managed using multi-methods approach including teachers’ dairies, co-teaching, observation, weekly discussion with team teaching, initial focus group discussion and second focus group discuss students. In addition, a rationalised measure will be used to enhance the results through pre-tests and post-tests, both of them provide additional measurements for the resolution of using numerical results, to provide with a complete view of the data. The multiplicity of approaches succours me to easily organise and analyse unstructured information.

(As it is shown from the image above I intend to return to work in education after completing my research to obtain in-depth understanding of the same or similar situation).

III. SAMPLE

The current observation utilises a case-study; the research will be applied in primary schools, for girls and boys with a size sample at approximately 60 students in two classrooms with two teachers, AR can be carried out with a limited number of participants, even a single student (Fisher, 2012). The research focuses on a boy’s school and on a girl’s school; I will be involved in the research as a participant and an observer monitoring the students, as well as the research process. Moreover, the underlying premise of an action project is that the research has a chance to gain Information in-depth. One of the potential drawbacks of the current study is it as the research is locked into a specific time, location and a unique set of circumstances. It’s proper to acknowledge that findings from action research cannot be generalised, however, the validity is to examine a situation in greater detail, reaching the root of the issue, and thus enabling comparisons with other similar situations (Winter 2006; Fisher 2012).

IV. DATA COLLECTION INSTRUMENTS

Throughout the observation, the researcher will use a multiple of investigation methods to gather the data. The study will be conducted in two stages to integrate theory and practice.

4.1 First Stage

The first stage aims to investigate the teaching methods of IE in primary schools in KB to identify the teaching method employed by the teachers and how it relates to the subject at hand. How can it be changed to enhance the learning process? What proof is there that the teaching method is filled with errors? Is the issue actually worthy of examination? - My intuition is that current teaching methods are not promoting high order thinking skills. It is worth noting here that my opinion about current educational methods is not arbitrary, but founded on my considerable experience as an educational professional.

This first stage of the research sets out to substantiate this hunch. Interviews will be conducted to collect data from the three sectors mentioned above. Three members from QA, eight from ‘Specialist supervisors’ and four Islamic teachers. The collection of data will help the researcher to evaluate whether these teaching methods are sufficient to develop critical thinking and problem-solving. The discovery will able to assist in explaining current teaching methods in IE in primary schools in Bahrain. Furthermore, Face-to-face interviews will be conducted to discuss the topic in depth. According to Hennink et al. (2011), the manner of gathering data ‘one-to-one’ involves an investigator and a candidate discussing the matter in depth. In addition, the study will include semi-structured interviews, which are “introduced by an open question and ended by a confrontational question and the relations formulated in these questions serve the purpose of making the interviewee’s implicit knowledge more explicit” (Flick, 2009:156-157). The interviews will be conducted in a triangular direction; The motive for selecting these three sectors includes the fact that QA is a separate authority from the MoE, which is intended to improve the quality of learning. Besides, specialist supervisors in IE supervise schools regularly and have
long experience in assessing the learning process. What’s more, Islamic teachers have outstanding knowledge and information about this subject. The compilation of data from this triangular direction will lead to validity in this detection. Considerably, in terms of the ethical issues of this method, the researcher has to obtain permission and informed consent from the three sectors. The study will commit to the confidentiality of the interviews and the identities of the schools and teachers will remain anonymous.

4.2 Second stage

In order to collect data to address the problem, the second stage will be managed using a multi-method approach. The ‘Learning Pack’ which will be run in stage two is devised as an intervention to address the problem. The purpose of the present study is to create a ‘Learning Pack’ based on PBL that will help students to develop a number of competencies, such as the ability to solve problems and development of higher thinking skills. As emphasised by Elliott (1991), Denscombe (2010) and Winter (2006a), researchers must exhibit the need for change to analyse and to assess a situation in order to enhance the learning process. The devised Learning Pack will take the form of an issue, which will be faced by the student - in which the problem serves as the stimulus for learning. Students will then use their problem-solving skills to find the legal provision independently without intervention from teachers according to the available evidence of the holy texts or with reference to a legitimate source if the information is not available in the Holy Quran and Sunnah. A couple of limitation faces the new approach, which means that it’s still uncertain what impact problem-based learning (PBL) will have on teachers and students alike. Nevertheless, the observation of Smith and Harland (2009) have revealed that teachers had positive attitudes towards PBL. Other limitations as a number of authors (Bernstein et al. 1995; Smith and Harland 2009; Creswell 2012; Winter 2006) have stated that it is highly important to carefully establish the considerations of the working relationship in order to allay the worries that individuals might have regarding a perceived absence of structure. However, prior to the implementation of the ‘Learning Pack’, the participant teachers requested the chance to evaluate it, thus becoming active arbitrators in the research. In the second stage, the preliminary outline of the research methodology included a number of methods.

4.2.1 Co-teaching

AR approach basic on the concept of collaborative, this cooperation between the researcher and the two teachers, I will take the role of professional experiences and part insider in order to make better sense of the topic, acquire a deeper, wider view and obtain a comprehensive collection of evidence. As a competent theorist and practitioner-researcher, this approach can provide me with insight, while the role of participant teachers is to provide an insider perspective; the great significance of collaboration is the fact that it has the ability to attract other participants to actively engage in the research process (Richards and Farrell, 2005). Along the same lines of thought, Smoekh (2008) argued that the teachers selected to take part in research studies, not only contribute greatly to their academic institutions, but have possessed extensive knowledge and skills. Another core reason for using co-teaching in this study is the need to prevent the status of the individuals who puts forth an idea from having a negative influence on the validity of that idea (O’Brien, 1998). A number of promoters of action projects advocate careful negotiation achieve this situation and the collaboration will be employed equally between the team workers. In accordance with Creswell’s suggestion (2012), the teachers were all on an equal footing in the action research process, despite various power issues between the practitioners. For that reason, a theoretical researcher myself and a part insider I will support teachers with essential knowledge, in the form of a training course, in which could enhance the professional growth of the teachers, Somekh (2005) and Somekh et al. (2008) confirms that outside researchers who have an understanding of the professional context are boosted by other practitioners (teachers). Thereby, the training course will be run for two hours over five days. Likewise, the participant teachers are willing to cooperate with the researcher in teaching the new design and have undertaken a training course to assist them, in dealing smoothly with the procedure of solving problems, since they believe that change and creativity are required in this era. On the other hand, the teachers have an in-depth comprehension of their work and surroundings; thus, being better informed about their actions, practitioners can expand the knowledge base related to their profession (Somekh, 2006; Somekh et al., 2008). Other boundaries coincided with co-teaching, as revealed by Fisher (2012), is that many teachers find it difficult to combine research with professional practice, as this adds a considerable weight to their workload. Nevertheless, the objective of this study is to provide teachers with the opportunity to develop and consolidate their competences, as well as to implement diverse research methods on any given subject in their field of expertise. Besides, the study enables teachers to outline their own teaching methods by emulating the projects and applying them in different contexts (Richards and Farrell 2005). Being a new face in the classroom will affect teachers and students; however, to minimise my impact in the classroom. I will be alert the teachers and students that I will not collect data to examine, then I will be there to impartially, as far as possible, observe what happens.

4.2.2 Observation

Another method that will be manoeuvred to collect data for this observation, as the focus is on the impact of PBL on students. This observation will be enacted by the practitioners (the researcher and teachers interchangeably), the focus of the observation will be on the role of the facilitator, the role of the student groups and learners and how processes of PBL are run. The team also perceive the mutual interactions and reactions in small groups and their participation in the whole-class discussion. The grouping of students will be based on the result of pre-tests and teachers’ comments; teachers make use of their own perceptual patterns that they have developed over time to appraise the actions of the students (Nias 2006). To gather data directly from the observer’s position, the observer will be located close to the groups to monitor the students. Data triangulation is able to offer a different perspective on the matter, as each individual has different nurture and life experiences (Nias 2006). Furthermore, data triangulation affords new insights into the matter, as it emphasises the incongruities between different perspectives, as well as within a single perspective. As noted by Grandau (2005), this endows action exploration with depth and expansiveness.
4.2.3 Weekly discussion with cooperating teachers

Weekly discussion with two teachers in order to generate an in-depth practical apprehension of problems and to enable the creation of practical solutions to these issues, this technique will develop my cognisance of the difficult situations in practice and will promote forward thinking as well as effective changes in practice (Smoekh, 2006; Creswell, 2012). In particular, the purpose of the weekly discussions is to structure the workflow and to determine and remedy any existing weak points in the learning process. Moreover, the verbal interim reports presented during the discussion meetings were intended to stimulate the participants to actively engage in the research process (Smoekh 2006), as they were formulated not as final results but as a basis for continuing discussions (O’Brien, 1998).

4.2.6 Face to face interviews with teachers and students

In order to obtain a wide and profound interpretation. Face-to-face interviews will be employed with the two teachers and the students. The student sample will be selected depending on the results of the tests, for example, I will select the learner whose result has changed considerably and the student whose outcome is unchanged to investigate the impact of the approach. Semi-structured interviews will help me understand other individuals’ views. This process will be active after the test to assess teaching and learning using the PPL approach, to compare it with other teaching methods, and to detect its effect on the students. For instance: if there were any changes in students’ behaviour and learning throughout the period? When did the changes occur? Was the effect negative or positive? Ultimately, drawing on the researcher’s initial plan of the research process could lead to changes through implementation, (as I mention earlier) flexibility is inevitable in action research because we are working in live conditions, not controlled laboratory conditions, the techniques mentioned above may need to be conducted more than once; the researcher needs to take a subtle approach to obtain specific data. Taking into consideration, the mood of teachers and students may change due to work and study pressures.

Finally, after the evaluation of the impact of the PBL approach through the analysis of methods mentioned above, the purpose of the action project is to progress the findings through a sequence of periods in rotation between data-gathering and analysis (Winter, 2006a). From the results of the tests: is it possible to observe any changes? What is the extent of these changes? This provides the study with numerical results.

V. DATA ANALYSIS

After the required information was gathered, analysing became the decisive phase. I will go through the research and the associated literature to guide the data analysis. A researcher diary will be maintained during the research to record all procedures and describe the atmosphere. The interviews in stage one will be recorded to ensure that no data are omitted. The analysis will be conducted using NVivo software to produce qualitative data. The programme will help the researcher to draw links, comparisons and sound conclusions from the data. The inductive method will be employed for the analysis of the data in the second stage. This method enables certain themes to be outlined through the systematic reading of the entire body of data (Thomas, 2006, cited in Smith and Harland, 2009). Despite the fact that the number of ‘concepts’ may be significant, the limited number of scripts meant that the majority of ideas would not occur frequently. The inductive method is capable of de-constructing the scripts, generating an ordinary general interpretation (Winter, 2006b). Thus, the methodology requires repeated readings and intuition, with certain themes emerging from this process. As a result, a crucial structure of ideas will be generated based on the number of times they are recorded. In this way, more accurate and reliable results will be obtained. An action research report displays information about events organised in chronological order over a period of time (Winter, 2006a). The use of multi-methods and the continuing evaluation process in the current study will enhance the validity of this study; action research involves a constant process of accumulating and analysing data, generating interpretations, making decisions and assessments (Altirichter and Poach, 1989, cited in Somekh, 2006). As indicated by Somekh et al. (2008), hypotheses are substantiated directly through practice; they are not tested separately and then implemented in practice. The accumulated data will be employed in support of the formulated hypotheses. In addition, by applying the ‘Learning Pack’ in two different samples (two classrooms) from the population, comparisons with other similar cases will be carried out to enhance the validity and reliability of the proposed hypotheses even more. Another part of analysis quantities’ data seems possible and useful. Consequently, a T-Test will be run to obtain these data. In general, this measures significances between the average groups before and after the application of the new approach and then measure each category of higher thinking skills and problem-solving skills. In time the researcher drew up an initial plan of the process of the examination which could be changed through implementation depending on the changing situations. Furthermore, the plans and methodology of AR are flexible and can be adjusted as the process of action research unfolds (Cohen 2010; Somekh and Lewin 2005), due to the fact that the actions of people are deeply embedded in everyday habits, created through time and are influenced by individual perceptions and beliefs (Somekh, 2006). O’Brien (1998) labels this principle ‘Risk’, arguing that this openness of interpretations and exchange of ideas may have a negative effect, but he argues that whatever the findings ‘learning will take place’ (P: 1). Eventually, the interpretations and findings from the second stage contribute to the evaluation of the first stage in terms of the effectiveness of the PBL approach, how it might enhance the learning process and how far it could mature the thinking skills of students.

VI. ETHICS

Ethics is an important part of the study, in which the researcher has considered the matter. Anonymity, maintaining confidentiality plus protecting identities will be considered and applied throughout the research. Moreover, the study obtained permission from the authorities to conduct the research, including the observation, interviews and apply the new ‘Learning Pack’,
although they stipulated that the MoE would have to agree to the
new ‘Learning Pack’ before its application.

REFERENCES


AUTHORS

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