

## *An Exploration of Causal Attributions of Teacher Educators: A Single Case Study*

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### **Abstract**

In this study, an academic's who has been employed in a foundation-supported university teaching barriers and accompanied attributional reasoning were examined in the context of his belief system with regards to learning, teaching and knowledge. This study is a basic naturalistic inquiry. By means of qualitative data gathering and analysis, it was aimed at estimating how the relation between teaching barriers and attributional reasoning was influenced being held pedagogical-epistemological belief system of the academic. Qualitative data was collected through two different semi-structured interview protocols and gathered data was analysed with an inductive and interpretivist manner. The scholar's beliefs system's divergences (teacher-centred vs. learner-centred) allowed to explore the presumable relation of barrier-attribution in the context of pedagogical-epistemological belief system. It was detected that the academic held a more teacher-centred pedagogical belief system. In this context, it was also detected that the academics was liable to make attributions to overly external, non-controllable and stable factors in illuminating her barrier-attribution relation. Major outcomes of the study are evaluated by means of psychological (i.e., attribution theory) and instructional (pedagogical-epistemological beliefs) lenses and suggestions are offered in the context of higher education.

**Keywords:** *Teacher Education, Epistemological Beliefs, Attribution Theory*

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## **Özet**

Bu çalışmada vakıf üniversitesinde görev yapan bir akademisyenin öğretimsel süreçlerinde karşılaştığı bariyerler ve bu bariyerlere yönelik atıfsal akıl yürütmesi onun öğrenme, öğretme ve bilgiye yönelik inançları çerçevesinde incelenmiştir. Çalışma nitel bir perspektifte yürütülmüştür. Nitel veri toplama ve analiz süreçleri ile bariyer-atıf arasındaki karşılıklı belirleyici ilişkinin, akademisyenin pedagojik-epistemolojik inançlarından nasıl etkilendiği açıklanmaya çalışılmıştır. İki farklı görüşme protokolü ile veriler toplanmış, tümevarımcı ve yorumlamacı bir şekilde veriler analiz edilmiştir. Katılımcının pedagojik-epistemolojik inançlarının yönelimi (öğrenen-merkezli; öğretmen-merkezli) ya da ayrıksılığı bariyer-atıf ilişkisinin bahsi geçen inanç sistemleri bağlamında incelenmesine izin vermiştir. Katılımcının daha öğretmen-merkezli bir pedagojik inanç sistemine sahip olduğu tespit edilmiştir. Bu bağlamda katılımcının dışı dönük, kendi kontrolünün dışında olan ve bariyerlerin kalıcılığını ya da sürekli olduğunu vurgulayan atıfsal akıl yürütmeye sahip olduğu tespit edilmiştir. Çalışmanın temel çıktıları yükseköğretim bağlamında psikolojik (atıf teorisi) ve öğretimsel (pedagojik-epistemolojik inançlar) lenslerle değerlendirilmiş ve önerilerde bulunulmuştur.

**Anahtar Kelimeler:** *Öğretmen Eğitimi, Epistemolojik İnançlar, Atıf Teorisi*

## **Introduction**

### **Problem Statement**

Teachers' beliefs regarding issues such as nature of teaching, learning and instruction have a very strong impact on their practices (Aguirre & Speer, 1999; Brickhouse, 1990; Hashweh, 1996; Onosko, 1990; Stipeck, Givvin, Sallmon, & MacGyvers, 2001; Strauss & Shilony, 1994; Tobin & McRobbie, 1996). A crucial part of teachers' beliefs is considered as their attributional reasoning regarding teaching, learning and other materialistic or situational factors (e.g., Darley & Fazio, 1980; Kennedy, 2010; Pajares, 1992; Peterson & Barger, 1985).

In Turkey, there have been proposed changes for learners' voices to be heard in classrooms to comply with the internationally scaled reform-based standards of the teaching and learning (MoNE [Ministry of National

Education], 2004a, 2004b, 2004c, 2004d; YOK [Higher Education Council], 1998). Connately, teacher educators in faculties of education therefore have newer and novel roles in educating prospective teachers who are thought as agents supporting and favouring learner-centred teaching. However, independent from any contextual or situational factors, teacher educators may have instructional barriers when they implement their instructional approaches. Additionally, teachers' pedagogical and epistemological beliefs are considerably indicative in characterizing teaching barriers and related causal attributions (Anderson, 2002; Johnson, 2006; Kielborn & Gilmer, 1999; Welch, Klopfer, Aikenhead, & Robinson, 1981). In other words, teachers' belief systems related learning, teaching and epistemology are substantially indicative in understanding teachers' barrier clarifications and related causal attributions. It is therefore plausible to explore the patterns between teacher educators' pedagogical-epistemological beliefs and barrier definitions that are accompanied with causal attributions to the faced barriers. The research questions of the study are therefore:

1. In what ways and to what extend the teacher educator explicate his theories and practices in terms of learning, teaching and epistemology?
2. What are the structure and nature of the teacher educator's instructional barriers that he has faced during teaching university courses?
3. What is the teacher educator's attributional reasoning when he has faced instructional barriers during teaching university courses?
4. What are the qualitative linkages between the teacher educator's pedagogical-epistemological beliefs and barrier definitions that are accompanied with causal attributions to the faced barriers?

## **Theoretical Framework**

### **Attribution theory**

We, as human beings, are inherently motivated to explain and make sense of events that those are occurred around us. Accordingly, Weiner (1970, 1985, 2010) has accounted for why and how individuals tend to attribute events to different causes. In order to explain that type of human behaviour's nature and complexity, Weiner (1992, 1994) theorized 'Attribution Theory (AT)' and AT has been conceived as a motivational construct advocating

individuals' causal attributions for perceived causes of events may be influenced for instance their prior experiences, social circumstances and cultural norms (Weiner, 1985, 2010). Indeed, as Pintrich and Schunk (2002) proposed, AT evaluates individuals as naïve scientists who have efforts to analyse their environments in general, and to comprehend their own actions and behaviours of others in particular. Weiner identified five qualitatively distinctive, but interrelated, components to elaborate the attribution model. These components are interacting in nature (Pintrich & Schunk, 2002; Weiner 1986, 2000) and categorized as;

- Antecedent conditions,
- Perceived causes of events,
- Causal dimensions,
- Psychological consequences,
- Behavioural consequences (Pintrich & Schunk, 2002, p. 98).

The present study deals with *perceived causes of events* and *causal dimensions* of individuals' attributional behaviours regarding their *faced barriers while teaching university courses*. To illustrate, AT is a cognitive theory of motivation and has utility value in educational settings in order to find out learners' attributional reasoning concerning their school success or failure (Pintrich & Schunk, 2002; Weiner 1986, 2000).

Weiner (1985, 2010) differentiated individuals' attributions through constructing three dimensions as (i) *locus of control*, (ii) *controllability*, (iii) *stability* seen in Table 1 as in the form of intersections of different aspects. The locus of control dimension stands for one's assessment regarding causes of events might be explained by taking internal or external factors into consideration (Pintrich & Schunk, 2002). For instance, on one hand, an individual may attribute school success or failure to her ability or efforts that those are conceived as internal control factors. On the other hand, she perceives the causes of *same* success and failure because of task difficulty, teacher's assessment criteria, and simple grading system of evaluators or just luckiness as the external control focuses.

**Table 1.** *Dimensions of Theory of Attribution*

	Internal		External	
	Stable	Unstable	Stable	Unstable
<b>Uncontrollable</b>	Ability	---	Task difficulty	Luck
<b>Controllable</b>	---	Effort	---	---

One of the second properties of causal dimensions, as stability, refers to perceived causes of events are whether or not subjected to changes over the course of time. In educational settings, for instance, academic ability and educational contexts might be perceived as instable factors, whereas individuals' academic efforts and chances or luckiness can be changeable over time with respect to one's performance's failure or success. As a third property of causal dimensions, as Pintrich and Schunk (2002) and Weiner (1986) commonly recommended, controllability implies that events, from the lens of learners, may have causes either controllable (i.e., one's effort to perform a task well) or uncontrollable, (i.e., task difficulty, luck, context, teacher effect). Furthermore, Weiner (1985, 2010) elaborated AT by certifying some other common attributions that those differ on aforementioned three properties of causal dimensions. Put it differently, the quadrant of Weiner's model coined as perceived causes of events may also consist of both academically-oriented and general attributions such as ability, effort, luck, task difficulty, teacher, mood, health, fatigue, etc. In the present study, ability, effort, luck and some contextual determinants were explored as the perceived causes of events.

### **Teacher educators' causal attributions**

Teachers' attributions have been intensively explored with regards to students' maladaptive behaviours (e.g., Kulinna, 2007, 2008; Reyna, 2008; Reyna & Weiner, 2001). There has been a growing body of work emphasized on teacher attributions pertaining discipline-related issues (Bibou-Nakou, Kiosseoglou, & Stogiannidou, 2000; Bibou-Nakou, Stogiannidou, & Kiosseoglou, 1999; Brophy, 1996; Brophy & Rohrkemper, 1981; Davis

& Sumara, 1997). Teacher attributions regarding students' maladaptive behaviours are mainly externally oriented; such as family-related, school-related and student-related factors (Ho, 2004; Mavropoulou & Padelidiu, 2002; Poulou & Norwich, 2000; Soodak & Podell, 1994). Teachers make also attributions pertaining academic performances (i.e., successes and failures) of students (e.g., Clark, 1997; Conway, 1989; Soodak & Podell, 1994). Studies reported that teachers account for students' failures and successes by majorly considering student-related factors (i.e., ability), however, teacher-related (i.e., effective teaching strategies) or family-related factors are invisible within the attributions (Georgiou, Christou, Stravrinides, & Panaoura, 2002; Gosling, 1994; Kulinna, 2007; Medway, 1979; Tollefson & Chen, 1988). Teachers' causal attributions have also been investigated in terms of students' effort and ability for their performance outcomes. If a teacher makes an attribution failure to student's low levels of effort, the teacher may refuse to provide instructional scaffolding (e.g., Tollefson & Chen, 1988). Retributive punishment or remedial interventions are in action when teacher attribute that failure due to lack of student effort (e.g., Matteucci, 2007). As a whole, it is understood that teacher attributions show a pervasive externality. For instance, teachers find the causes of disruptive behaviours or students' academic failures as embedded in external factors (i.e., student-related, family-related, school-related). Moreover, effort and ability attributions have become important since its decisiveness pertaining classroom's motivational harmony (mastery goal orientations vs. performance goal orientations). Cultural and expert-novice comparisons of teacher attributions are also informative in assuming further teacher expectations and pedagogical actions.

## **Method**

### **Design of the Study**

A single case-study approach was conducted to capture how the case teacher educator has experienced and conceptualizes existing teaching barriers and associated causal attributions. Case-study approach is one of the best vehicles for grasping "intensive descriptions and analyses of a single unit or bounded system such as an individual, program, or group" (Merriam, 1998, p. 19). By conducting a single case-study, our intent was to obtain a holistic understanding of the teacher's reflections on her teaching barriers and associated causal attributions. We looked at his teaching barriers and

associated causal attributions by employing a single case-study since its focus, as Merriam stated (1998), “on a particular situation, event, program, or phenomena” (p. 29).

### **The Participant and Context**

The present study aim to gain in-depth understanding of the concepts by in-depth data obtained from a unique case of teacher educator. The mentioned teacher educator therefore was attained this study to response interviews by sharing his opinions and reflections. The participant was selected purposefully based on his existing conditions. For instance, he has over 30 hours lessons and varying university course types such as educational psychology, learning theories, learning and instruction, and so forth. The participant’s pseudo name is Roger in order to keep the anonymity of the data. The university he carried out his occupation is a one of the largest privately founded universities in the Turkey. University has academic units of 10 faculties with 55 programs, three graduate schools with 40 programs, one school of foreign languages with two programs , three vocational schools with 154 programs with the around 30.000 students.

### **Data Collection Instruments and Procedures**

In a qualitative study, peoples’ perspectives and experiences are given great value. Due to this the main data collection instrument of the study was interview. Interview was crucial in this study because they provide researchers to understand the thoughts of participant according to teaching barriers and associated causal attributions. Arksey and Knight (1999) stated that the qualitative research interview is a valuable research method for exploring “data on understandings, opinions, what people remember doing, attitudes, feelings and the like, that people have in common” (p. 2). Once the participants have been identified, their views were sought face to face, *semi-structured interviews*. Semi-structured interviewing is more flexible than standardized interview and this method allows for the exploration of emergent themes and ideas rather than relying only on concepts and questions by probing for novel, relevant information, through additional questions (Hockey, Robinson, and Meah, 2005). These interviews aim to gather qualitative data of self-reflection of participants on teaching barriers and associated causal attributions. The Interview Schedule (Appendix A) is essentially composed of open-ended questions

in order to describe different aspects of perceptions and opinions and to focus on particular themes structured beforehand according to the research questions (e.g., Anderson, 1996; Anderson, 2002; Colburn, 2000; Hashweh, 2005; Johnson, 2006; Newman, et al., 2004; Roehrig & Luft, 2004). Particularly, Anderson's (1996) reported document (Study of Curriculum Reform. [Volume I: Findings and Conclusions] Studies of Education Reform). The interview sessions planned to take about two and half hours. The interview was conducted by the researchers and recorded for transcription, and analysis. Interviewee was informed regarding the purpose of the research. Some demographic information was also collected. In order to help researchers to catch all the details, the interview was recorded after obtaining the consent of the participant. The interview protocol was composed of 41 questions divided into 9 sets, each set approaching the issue from a different perspective.

### **Analysis of Data**

Data analysis for interview was carried out immediately after the conducted interview for considering the theoretical saturation had been reached or not. For the interview researcher captured voice memos on a voice recorder during interview and transform the voice of a single speaker into written words. For this process "*Dragon Dictate*" program was used to convert speech to text. Dictating to the computer allows users to write their ideas freely as they think. This program allows placing the ideas in the correct order by moving text, copying, pasting, cutting, deleting and inserting tables, images and other elements. All recorded interviews were transcribed by the researchers that conducted this present study. Data analysis was based on the following process. After providing accuracy of transcribed data to analysis (i.e., cross-checking), the teachers' attributions to faced barriers were defined line-by-line (i.e., analytical expressions for stating attributions) and section-by-section (i.e., higher-order or subcategories to indicate the barriers faced) (Lincoln & Guba, 1985; Strauss & Corbin, 1998). For the analysis of the barriers faced, a deductive approach was followed since we have a pre-structured close coding system incorporating categories and indicative sample codes to capture the faced barriers and related causal attributions. In the second phase, associated attributional reasoning of the teachers was determined by majorly taking some *specific connective words* into action. For instance, some connective words such

as “since, because, due to” were focused upon since they are clues of attributional reasoning.

### ***Trustworthiness***

Even though the data collected were limited, other techniques were utilised to meet the standards of validity for a naturalistic inquiry. First, to attain a theory/perspective triangulation, two distinctive but complementary theoretical perspectives (instructional barriers theory and attribution theory) were taken into consideration for the examination and interpretation of the data. Second, the authors discussed the ongoing investigation with their colleagues during the structuring of the interview protocol, data analysis and interpretation, which served as peer debriefing, thus supporting the dependability of the research. Third, a member check was conducted with the academics through meetings to revalidate the established codes, themes and extracted interpretations. The member check was to demonstrate the credibility of the study.

### **Results**

The purpose of this study was to explore the patterns between Roger’s pedagogical-epistemological beliefs and barrier definitions that are accompanied with causal attributions to faced barriers. In the rest of the paper, findings of the study are presented in terms of addressed research questions. First, the pedagogical and epistemological belief system of Roger is represented, and then the barriers and related causal attributions are introduced. Finally, how these psychological components are fluctuated with each other is shown in an evident-based sense.

### **Pedagogical-Epistemological Belief System of Roger**

It has been primarily important for us to detect the salient points of pedagogical-epistemological belief system of Roger in illuminating his barrier clarifications and related causal attributions to the stated barriers. As seen in Figure 1 and Figure 2, Roger has a rather complicated pedagogical-epistemological belief system towards learning, teaching and instruction. Roger’s pedagogical beliefs incorporates four core components, (i) learning, (ii) teaching, (iii) learners, and (iv) features of the teachers whereas his epistemological beliefs consists of two core components as (i) characteristics of knowledge, and (ii) characteristics of scientific

knowledge.

“There are similarities of course, I have tendency to teach as I learned. To explain, while I was learning, I need to feel the excitement of my teacher in order to acquisition of knowledge.”

In terms of “learning”, the most featured point from the lens of Roger is “Teach as you preach”. It confirms the fact that he has relatively adopted a knowledge-transmission mode of teaching. He is of the idea that his educators’ teaching styles have been stuck with him as he has considered previously learned teaching modes as “knowledge conveying”.

“I have always felt that the topics which I enjoyed to teach transmit better. Because while I feel the excitement from my teacher it stuck on me and I’m trying to teach with the same excitement. As I said before I am teaching with actual and possibly interesting methods. (What is your role here?) There is no other role rather than knowledge transmitter.”

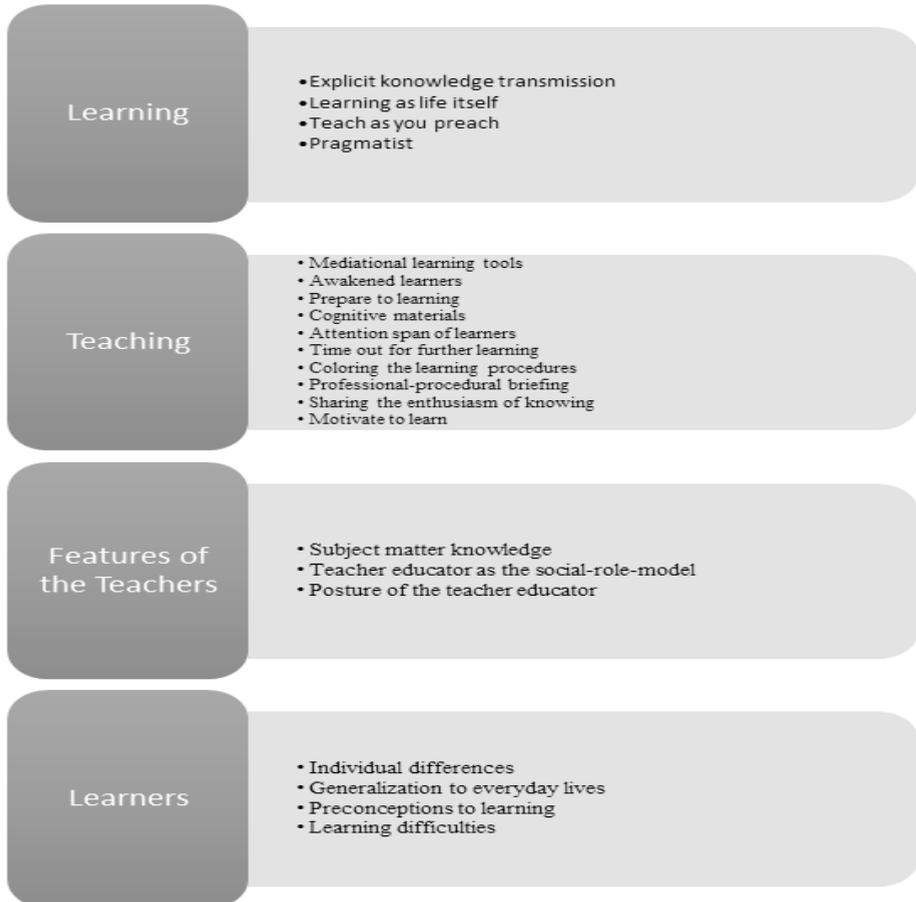
Roger has a consistent teaching clarification similar to his learning understanding. In terms of teaching, in addition to knowledge-transmission, he conceives the teaching phenomena as sharing the enthusiasm of knowing. He has been feeling happy and excited when he has learned or discovered a novel information or knowledge and he desired to see the same emotional reflections on his students to teach the content under discussion in more proper and influential way.

“Sometimes some students’ mood is ready for learn while others not in their mood. Some of the students come to class in a depressive mood or they have high anxiety because of not knowing about basic requirements of the university. So, a teacher needs to be more careful in terms of these situations. ...The methods I follow have variety. It is not possible to evaluate a person in every facet because of population of classes. Some students’ personality can be more convenient while others not. It is a really hard job to teach a student if s/he has some prejudgments.”

“...Must be a good role model to me. ...Students acquiring knowledge if they trust you and approve you as a role model.”

Rogers also explicated his pedagogical interpretations by means of making some references to the learners. The most prominent aspects of the Roger's interpretations to learners are their inherent individual differences. Roger has noticed that his students may have cognitive, emotional, practical and experiential differences and diversities that those have been effective in rearranging Roger's instructional tendencies. Actually Roger sees the innate individual differences and variations of his students as a negative or contaminating aspect in terms of instructional processes. Additionally, Roger is of the idea that his students have some rigid preconceptions to learning and teaching. This has been a very compelling and mind-stretching issue for Roger when it comes to teach a prejudiced learner a concept of, for instance, educational psychology.

**Figure 1:** *Roger's pedagogical-epistemological belief system*



Finally, from the lens of Roger, “features of the teachers” has been specified as a prominent aspect of his beliefs about teaching and learning. According to Roger, a teacher educator should have a holistic and integrated knowledge base regarding his field of teaching. Moreover, teacher educator should be a social-role-model for their students. Teacher educators’ well-established subject matter knowledge may contribute trust issues or relations between students and teacher educators. When students conceive that their teacher educators’ knowledge base is consistent and reassuring, teacher educators might be seen as social models. Such kind of expressions of Roger indicates that he has been adopted a role model who provider of knowledge claims to his students in order to gain their trust and being mentioned as a social role model.

There have been consistencies between Roger’s pedagogical belief systems pertaining learning and teaching and epistemological beliefs systems regarding knowledge and knowing. We sought for the interconnections between pedagogical and epistemological beliefs since epistemological belief system of Roger might be a vital indicator of his pedagogical orientations and in revealing out the structure and nature of faced barriers and accompanied causal attributions.

“Knowledge is everything you wonder about: acquiring this stuff, recording this stuff. I’m describing this process as record them to long-term memory.”

Roger’s epistemological belief system consists of two structural components. These are the characteristics of (everyday) knowledge and characteristics of scientific knowledge. Once again, his epistemological orientations signal Roger’s modes of teaching, learning and instruction as in the form of transmission of facts from knower (i.e., the teacher educator) to receiver (the learners). To support, Rogers believes the fact that knowledge is a type of intellectual entity that has been stored into learners’ memory. It explicitly shows that he conceives that learning has been occurred within knowledge processing moments. To advocate, he uses some particular terms such as working memory and long-term memory as the indicators of information-processing model of learning that has been though as a traditional explanation how human beings learn.

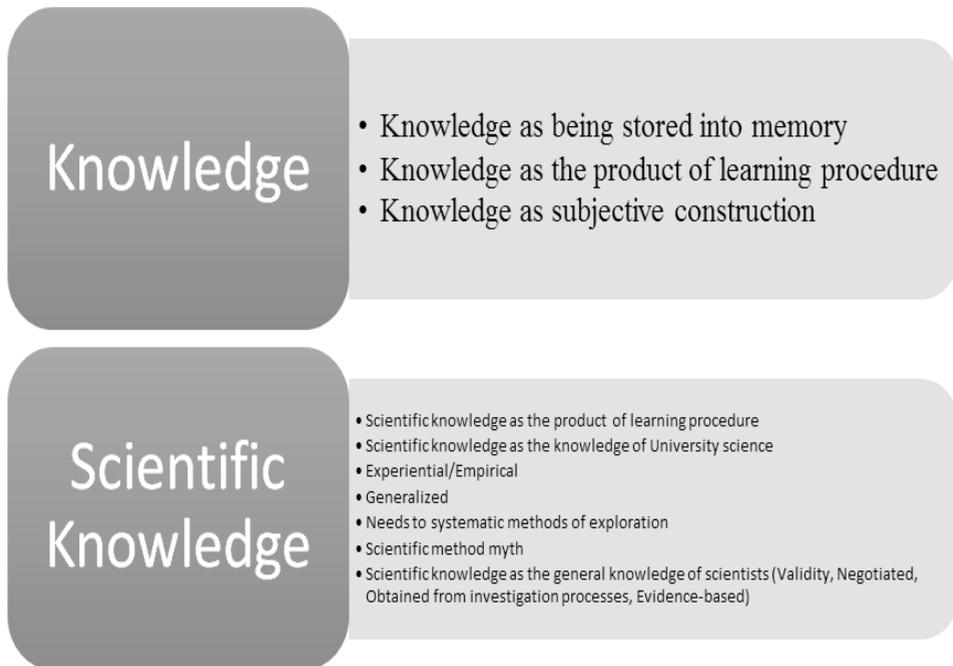
“Because, it is directly related to the knowledge learning that you actualise the learning phenomena. I think that knowledge is the result of learning. If it is individual this is just information. If it became common than it become scientific knowledge.”

Roger’s knowledge is not scientific or he has only the scientists’ knowledge in order to be transferred through providing references to the owners of the knowledge of science. Put it differently, his pedagogical beliefs are explicated by means of deep-seated epistemological beliefs of Roger. Learning and teaching, as Roger epistemologically accepted, is the work of transmission of expert knowledge (i.e., scientist) to novice knowers (university students) even though Roger has been substantially informed about the specialties of scientific knowledge as he indicated it should be valid, negotiated among scientific communities, obtained from evidence-based exploration procedures.

### **Barrier Clarifications and Causal Attributions’ Tendencies**

Roger has provided us rather sophisticated teaching barrier clarifications. In Figure 3, Roger’s teaching barrier clarifications are summarized. As seen Roger has two qualitatively distinctive, but interrelated teaching barriers faced. On one hand, Roger defined “technical teaching barriers”, on the other hand, he holds “contextual teaching barriers”. Roger’s technical teaching barriers were collapsed into four higher-order themes.

**Figure 2:** Roger's epistemological belief system



First, Roger has been of the idea that he has been inhibited through “pedagogical barriers” that he has faced frequently. Initially, lack of instructional resources and lack of classroom space providing a comfortable physical atmosphere are major obstacles from the lens of Roger. Within the theme of pedagogical teaching barriers, Roger also mentioned about disruptive administrative external audit. It has been troublesome in terms of pedagogical terms for Roger and he does not desire to undertake out-of-specialization courses and that types of liabilities are soul-destroying for him to carry out his all pedagogical competencies and existing teaching potential.

Roger also stated about assessment challenges under the higher category of technical teaching barriers. There has been a chain reaction among the faced issues pertaining assessment from viewpoint of Roger. There have been over numbers of students who have taken the examination, but due to

accountability issues or “dedicated exam time” Roger has been obligated to include limited numbers of exam questions to assess the program outcomes for his students. As Roger has noticed and recognized, when this is the case, it is not possible to make a valid and reliable evaluation of students’ outcomes. Invalid, unreliable and obligatorily systematic error in his assessments is presumable realities of Roger’s teaching barriers within university courses in which prospective teachers have been taught.

Moreover, Roger mentioned about problems regarding planning, teaching and collaboration among colleagues over the course of implementations of university course requirements. He has obstacles within planning his teaching procedures due to time management. Time management issues have been emerged because of accountability. Roger has no sufficient collaboration with his colleagues in planning, designing and implementing course contents or other practical applications to move the students further in terms of theory-practice associations. According to Roger, there are courses that should be collaboratively planned and implemented, however, other colleagues have not been aware of the crucial need of collectivism to handle the course liabilities deservedly. There have been also irrelevant classroom conditions in which there are no sufficient facilities that have been aggravated the former issues, as Roger stated. In addition, Roger clarified teaching problems in terms of lack of support for professional and academic development support. Roger introduced us a dilemma that on one hand university regulations have explicitly required academic publications, on the other hand, intensified and overloaded working hours that may be dedicated to academic or non-academic works have been intimidating any individual or common publication particularly for Roger.

**Table 2.** Roger’s barriers and attributional tendencies

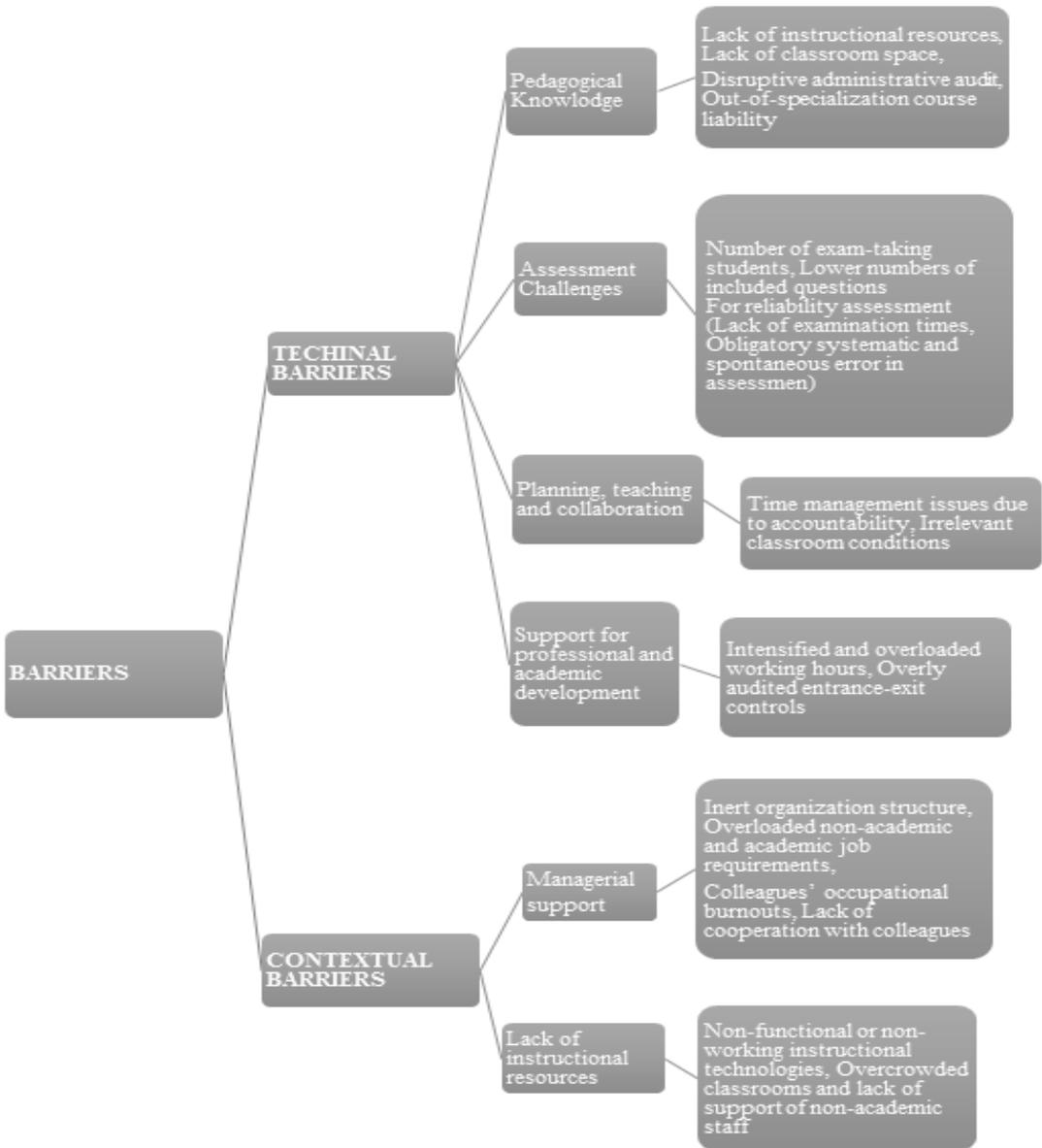
TYPOLOGIES OF THE BARRIERS EXTRACT-ED	Locus		Stab.		Control.	
	Internal	External	Stable	Unstable	Controllable	Uncontrollable
<b>INSTRUCTIONAL BARRIERS</b>						
1. Lack of instructional resources		X		X		X
2. Lack of classroom space		X		X		X
3. Out-of-specialization course liability		X		X		X
4. Disruptive administrative audit		X		X		X
5. Number of exam-taking students		X		X		X
6. Lower numbers of included exam questions	X			X	X	
7. Unreliability assessment	X			X	X	
8. Lack of examination times		X		X		X
9. Obligatory systematic and spontaneous error in assessment	X			X	X	
10. Time management issues due to accountability		X	X			X
11. Irrelevant classroom conditions		X	X			X
12. Intensified and overloaded working hours		X	X			X
13. Overly audited entrance-exit controls		X		X		X
<b>CONTEXTUAL BARRIERS</b>						
1. Inert organization structure		X	X			X
2. Overloaded non-academic and academic job requirements		X	X			X
3. Colleagues’ occupational burnouts	X			X	X	
4. Lack of cooperation with colleagues	X			X	X	
5. Non-functional or non-working instructional technologies		X	X			X
6. Overcrowded classrooms and lack of support of non-academic staff		X	X			X

Based on the clarifications that offered by Roger, Table 2 was structured to display the causal attributions of him regarding the reasons of the problems he has faced. As seen in Table 2, there is a condensed list of teaching barriers faced and pervasive externality of attributional reasoning tendencies of Roger. In terms of locus of control, except a few attributions, Roger sees the reasons of teaching barriers faced externally-oriented. Additionally, the same tendency has also been relatively valid for stability dimension in which Roger mostly attributed stable reasons when he explicated his teaching barriers. Consequently, Roger has made attributions to uncontrollable factors when he illuminated his teaching barriers within university courses.

Roger also stated contextual teaching barriers (see Table 2) that has two aspects as lack of managerial support and lack of instructional resources. In terms of managerial support, the first problem Roger faced the inert organization structure. Roger sometimes has needed bureaucratic procedures or treatments; however, there has been laziness when he has required a treatment that offers an augmented issue for Roger. Once again, administration has not been able to allocate the course hours or out-of-course jobs in an equal sense that explicitly has been emerged a compelling problem for Roger as overloaded non-academic and academic work requirements. Roger has not been benefited from administrative camp since as Roger indicated his colleagues who have been incorporated in administration have occupational burnouts.

This situation leads Roger to other alternatives as directly lecture the required content without make any reflective thinking on his actions or future expectations about the academic community in which he has been employed. In other words, Roger has made his work without questioning as his academic peers have done. Finally, lack of instructional sources has offered other compelling issues for Roger in terms of contextual teaching barriers. He mentioned that classrooms have been filled with non-functional and inoperative instructional-technological devices that are felt as shackles for Rogers.

Figure 3: Roger's Barriers



## Discussion and Recommendation

As a whole, the current study's outcomes sheds light on some important points in terms of higher education, particularly for teacher educators' working conditions and job circumstances. The first remarkable point is that there is a *pervasive externality* for Roger's attributions regarding faced barriers within teaching university courses (Ho, 2004; Kennedy, 2010; Mavropoulou & Padeliadu, 2002; Poulou & Norwich, 2000; Soodak & Podell, 1994). As narrated from the lens of Roger, he made either *technical* or *contextual*, commonly externally-oriented, attributions when he was required to reason about the existence of the faced barriers. That type of attributional reasoning of Roger therefore validates a *fundamental attribution error* (Weiner, 1972; Weiner, et al., 1987). Roger seems to interest in dealing with others' (colleagues, administrators, students, instructional resources, etc.) behaviours rather than their own. In other words, Roger has overestimated externally-oriented factors while he has underestimated the contribution of contextual or situational factors (Jones, 1979; Gilbert & Malone, 1995; Humphrey, 1985; Kennedy, 2010; Ross, 1977). It should be an expected result for us, however. To explain, Roger has a relatively knowledge-transmission mode of teaching that implies his pedagogical-epistemological belief system favours conventional learning and teaching paradigms. Put it differently, he has no internally-oriented or pedagogically-oriented attributions when he explicated his teaching barriers faced perhaps due to his belief systems concerning teaching and learning. For a different scenario, if he held the authentic signs of co-constructivist pedagogical-epistemological belief system and practical instructional applications of such kind of teaching and learning orientations, the case could be totally different. In the latter case, Roger might make attributions to the more internal, unstable and controllable factors as he has more control in modifying or altering his actions, future expectations from administrators, students and himself.

However, we finally have to make an interrogation of ourselves as researchers or authors of the study. As study shows, Roger has made intensively external attributions to the teaching barriers faced within university courses. Those types of attributional reasoning of Roger bring to mind numerous questions. For instance, over the course of time, while Roger has invited to carry out some coping strategies for the faced barriers,

will his barrier clarifications and related attributions change into internal or pedagogical ones? Will Roger makes healthier and more rational attributions to barriers faced within university courses? We acknowledge that Roger explicitly has made a fundamental attribution error. However, when we quest the university teaching *or* teacher educators' teaching quality, we should not have a chance to make fundamental attribution error similar to, for instance, Roger. As Kennedy (2010) discussed, most of the time, we may overlook some aspects of university teachers' working conditions and occupational circumstances that are fundamentally out-site of their control. These aspects can be listed as instructional resources, planning time, classroom size, overloaded course liabilities, accountability issues, and other negatively contributing university infrastructures. As shown, Roger made also very similar externally oriented attributions by referring classroom size, overloaded course liabilities, and inadequate instructional and technological resources. We should accept and tolerate such kind of teacher educator attributional styles since they are authentically out of, for instance, Roger's control. That types of university teaching barriers will be presumably negatively influencing Roger's attributional tendencies, but our main target cannot be deal with moving away these, stated also by Roger, *stable and non-controllable challenges*. More controllable and unstable factors (i.e., Roger's pedagogical skills for influential university teaching) have to be detected as achieved by the current study and Roger has to be permitted to retrain himself to cope with those kinds of attributional errors. For instance, if we desire to turn Roger's overly externally-related attributions into pedagogically oriented ones, first, as an instance, Roger has to be awakened about his attributional reasoning. We are of the idea that colleagues of Roger, as the external readers of research materials, relatively hold similar university teaching barriers and accompanying causal attributions to the faced barriers. It is therefore a well-designed and being implemented attributional retraining program both for academic staff and other employees will be vital and life-sustaining initiative in providing them an actual context in which they independently negotiate their teaching or working barriers and associated attributional reasoning in turning expectedly externalized ones to internalized and more controllable attributions. It should be strongly suggested since to meet the mutual expectations among the workers, administrators and academics of a university, inter-psychological and intra-psychological communications

and negotiations will be creating an emotional and cognitive surviving mechanism in preventing any kind of intellectual and labor-based isolation and burnout.

## REFERENCES

- Anderson, R. D. (1996). *Study of curriculum reform*. Washington: U.S. Government Printing Office.
- Anderson, R. D. (2002). Reforming science teaching: what research says about inquiry? *Journal of Science Teacher Education*, 13(1), 1-12.
- Arksey, H. & Knight, P. (1999) *Interviewing for social scientists*, London: Sage.
- Bibou-Nakou, I., Kiosseoglou, G., & Stogiannidou, A. (2000). Elementary teachers' perceptions regarding school behavior problems: Implications for school psychological services. *Psychology in the Schools*, 37, 123-134.
- Brophy, J.E., & Rohrkemper, M.M. (1981). The influence of problem ownership on teachers' perceptions of and strategies for coping with problem students. *Journal of Educational Psychology*, 73, 295-311.
- Brophy, J. (1996). *Teaching problem students*. New York: Guilford.
- Clark, M. (1997). Teacher response to learning disability: A test of attributional principles. *Journal of Learning Disabilities*, 30, 69-79.
- Colburn, A. (2000). An Inquiry Primer. *Science Scope, Special Issue*, 42-44.
- Conway, A. (1989). Teachers' explanation for children with learning difficulties: An analysis of written reports. *Early Child Development and Care*, 53, 53-61.
- Darley, J. M., & Fazio, R. H. (1980). Expectancy confirmation processes arising in the social interaction sequence. *American Psychologist*, 35, 867-881.
- Davis, B., & Sumara, D. J. (1997). Cognition, complexity and teacher education. *Harvard Educational Review*, 67, 105-125.
- Georgiou, S., Christou, C., Stravrinides, P., & Panaoura, G. (2002). Teacher attributions of student failure and teacher behaviour toward the failing student. *Psychology in the Schools*, 39, 583-595.
- Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias.

- Psychological Bulletin*,  
117(1), 21-38.
- Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries, *Educational Communication and Technology Journal*, 29, 75–91.
- Gosling, P. (1994). The attribution of success and failure: the subject/object contrast. *European Journal of Psychology of Education*, 9, 69-83.
- Hashweh, M. (1996) Effects of science teachers' beliefs in teaching, *Journal of Research in Science Teaching*, 33(1), 47-63.
- Hashweh, M. (2005) Teacher pedagogical constructions: a reconfiguration of pedagogical content knowledge. *Teachers and Teaching*, 11(3), 273-292.
- Ho, I. (2004). A comparison of Australian and Chinese teachers' attributions for student problem behaviour. *Educational Psychology*, 24, 375-391.
- Hockey, J., Robinson, V. & Meah, A., *Cross-Generational Investigation of the Making of Heterosexual Relationships, 1912-2003* [computer file]. Colchester, Essex: UK Data Archive [distributor], October 2005. SN: 5190, <http://dx.doi.org/10.5255/UKDA-SN-5190-1>.
- Humphrey, R. (1985). How work roles influence perception: Structural cognitive processes and organizational behavior. *American Sociological Review*, 50(2), 242-252.
- Johnson, C. C. (2006). Effective Professional Development and Change in Practice: Barriers Science Teachers Encounter and Implications for Reform. *School Science and Mathematics*, 106(3), 150-161.
- Jones, E. (1979). The rocky road from acts to dispositions. *American Psychologist*, 34, 107-117.
- Kagan, D. (1992). Implications of research on teacher beliefs. *Educational Psychologist*, 27, 65-90.
- Kennedy, M. M. (2010). *Teacher assessment and the quest for teacher quality: A handbook*. San Francisco: Jossey-Bass.
- Kielborn, T.L., & Gilmer, P.J. (Eds.) (1999). *Meaningful science: Teachers doing inquiry teaching science*. Tallahassee, FL: SERVE.
- Kulinna, P. H. (2007). Teachers' attributions and strategies for student misbehavior.

- Journal of Classroom Interaction*, 42(2), 21-30.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Matteucci, M. C. (2007). Teachers facing school failure: the social valorization of effort in the school context. *Social Psychology of Education*, 10, 29-53.
- Mavropoulou, S., & Padeliadu, S. (2002). Teachers' causal attributions for behavior problems in relation to perceptions of control. *Educational Psychology*, 22, 191-202.
- Medway, F. J. (1979). Causal attributions for school-related problems: Teacher perceptions and teacher feedback. *Journal of Educational Psychology*, 71, 809-818.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education*. San Francisco: Jossey-Bass.
- Ministry of National Education [MNE] (2004a) *Mufredat Gelistirme Sureci: Program Gelistirme Modeli Cercevesinde Yapilan Calismalar (Curriculum Development Process: Activities Conducted around the Curriculum Development Model)*. Ankara, Turkey: MNE.
- Ministry of National Education [MoNE] (2004b) *Tebligler Dergisi (Official Bulletin of MoNE)*, 67(2562), Ankara, Turkey: MoNE.
- Ministry of National Education [MoNE] (2004c) *Tebligler Dergisi (Official Bulletin of MoNE)*, 67(2563), Ankara, Turkey: MoNE.
- Ministry of National Education [MoNE] (2004d) *Tebligler Dergisi (Official Bulletin of MoNE)*, 67(2566), Ankara, Turkey: MoNE.
- Newman, W. J., Abell, S. K., Hubbard, P. D., McDonald, J., Otaala, J., & Martini, M. (2004). Dilemmas of Teaching Inquiry in Elementary Science Methods. *Journal of Science Teacher Education* 15(4), 257-279.
- Pajares, M.F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62, 307-332.
- Peterson, P. L., & Barger, S. A. (1985). Attribution theory and teacher expectancy. In J. B.
- Dusek (Ed.), *Teacher expectancies* (pp. 159-184). Hillsdale, NJ: Lawrence Erlbaum.

- Pintrich, P. R. & Schunk, D. H. (2002). *Motivation in Education, Teacher and Classroom Influences*. Pearson Education, Inc., Upper Saddle River, New Jersey, 07458.
- Poulou, M., & Norwich, B. (2000). Teachers' casual attributions, cognitive, emotional and behavioral responses to students with emotional and behavior difficulties. *British Journal of Educational Psychology*, 70, 559-581.
- Reyna, C., & Weiner, B. (2001). Justice and utility in the classroom: an attributional analysis of the goals of teachers' punishment and intervention strategies. *Journal of Educational Psychology*, 93(2), 309-319.
- Reyna, C. (2008). Ian is intelligent but Lashaun is lazy: antecedents and consequences of attributional stereotypes in the classroom. *European Journal of Psychology of Education*, 23(4), 439-458.
- Roehrig, G., & Luft, J. (2004). Constraints experienced by beginning secondary science teachers in implementing scientific inquiry lessons. *International Journal of Science Education*, 26(1), 3-24.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173-220). New York: Academic Press.
- Rossmann, G.B. & Rallis, S.F. (1998). *Learning in the field: An introduction to qualitative research*. Thousand Oaks: Sage Publications.
- Soodak, L. C., & Podell, D. M. (1994). Teachers' thinking about difficult-to-teach students. *Journal of Educational Research*, 88, 44-51.
- Strauss, A., & Corbin, J. (1998) (2nd ed.). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Tollefson, N., & J. S. Chen (1988). Consequences of Teachers' Attributions for Student Failure. *Teaching and Teacher Education* 4 (3), 259-265.
- Weiner, B., & Kukla, A. (1970). An attributional analysis of achievement motivation. *Journal of Personality and Social Psychology*, 15, 1-20.
- Weiner, B. (1972). *Theories of motivation*. Chicago: Markham.

- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
- Weiner, B., Amirkhan, J., Folkes, V. S., & Verette, J. A. (1987). An attributional analysis of excuse giving: Studies of a naïve theory of emotion. *Journal of Personality and Social Psychology*, 52, 316-324.
- Weiner, B. (1994). Integrating social and personal theories of achievement striving. *Review of Educational Research*, 64, 557-573.
- Weiner, B. (2010). The development of an attribution-based theory of motivation: a history of ideas. *Educational Psychologist*, 45, 28-36.
- Welch, W. Y., Klopfer, L. E., Aikenhead, G. L., & Robinson, J. T. (1981). The role of inquiry in science education: Analysis and foundations. *Science Education*, 65, 33-50.